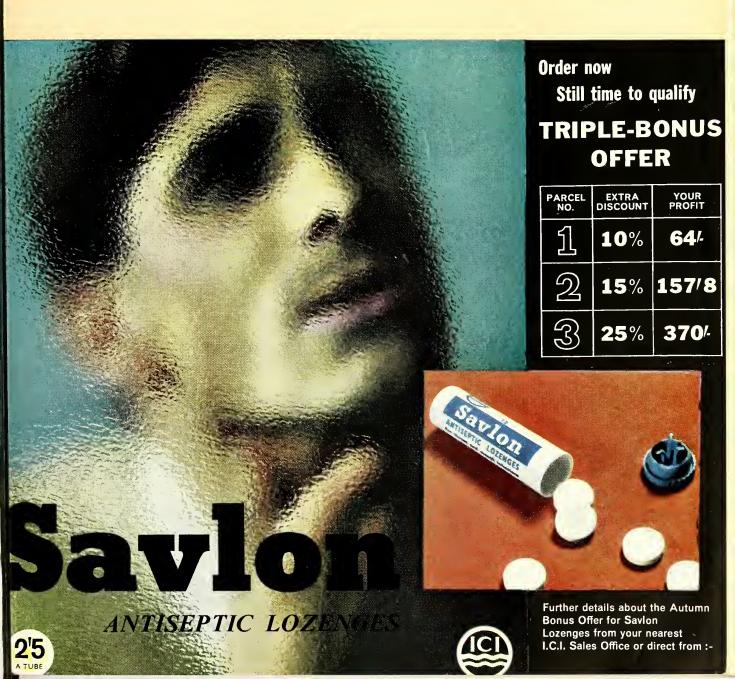
# CHEMISTAND DRUGGIST

SEPTEMBER 26 1959

# BRITISH PHARMACEUTICAL CONFERENCE NUMBER



TRADE

MARK

QUALITY..

## IN WHITE FLINT **GLASS CONTAINERS**



#### **DISPENSING BOTTLES**

I-oz. to 20-oz.

RIBBED OVALS

½-oz. to 16-oz.

PLAIN OVALS

4-0z., 8-oz. and 16-oz. **BOW-FRONT PANELS** 

1-oz. to 8-oz. and 16-oz.

**OLIVE OIL BOTTLES** 

2½-oz., 5-oz. and 10-oz.

OVAL TABLET BOTTLES

Nos. 1 to 71/2 sizes.

**ROUND SCREW JARS** 

Tall and Semi-squat. PANEL FLATS

I oz to 4-oz.

VIALS 12-oz. 10 3-oz.

#### RECTANGULAR TABLET BOTTLES

Nos. 1, 2, 3, 4, 5, 6 and 9 sizes

\* AMBER BOTTLES. We can now offer certain types of glass containers in Amber and your enquiries are

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FISHERGATE, YORK. Tel. YORK 23021 ALSO AT: CAROLINE HOUSE, 55-57 HIGH HOLBORN, LONDON, W.C.1. Tel. HOLBORN 2146

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  - Packed in easily handled cartons

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## Smith & Nephew Pharmaceuticals Limited

is an important subsidiary Company of the world famous Smith & Nephew Group of Companies.

Its declared policy is to serve medicine with high quality medical specialities and to carry out research in major fields.

Through its pharmaceutically qualified representatives, Smith & Nephew Pharmaceuticals offers doctors and pharmacists a comprehensive service backed by a research organisation and extensive library and technical facilities.

By this policy Smith & Nephew
Pharmaceuticals is carrying on the
100 years old Smith & Nephew tradition
of service to medicine and mankind.

Two of the papers read to the British Pharmaceutical Conference this week represent some of the work being carried out continuously in the laboratories of Smith & Nephew Research Ltd. Coates et al. describe their work in the anti-fungal field whilst the paper entitled "Further Studies on some Esters of 4-aminosalicylic Acid" by Drain et al. records part of the search for new drugs for the treatment of tuberculosis.



### Smith & Nephew Pharmaceuticals Limited

WELWYN GARDEN CITY . HERTFORDSHIRE

## SAVILLE GOES



WITH

8/6 Perfume (3/9) Top-to-Toe (4/9) No. 1559

Perfume (3/9) Perfume Stick (4/9)

No. 1159

5/9 June Perfume (3/9) 4 Bath Cubes (6d each)

No. 959

26/3 SILK-LINED. Orange Blossom Perfume (3/9), Perfume with spray of flowers (9/6), Top-to-Toe (4/9), Perfume Stick (4/9), Puffer Talc (3/6).

No. 1759

EAL CELLO

CHRIST

JUNE PERFUME GREETINGS CARD



Greetings for all occasions. A delightful miniature Greetings Card with a bottle of June perfume.

The bouquet of June flowers specially painted for Saville by John Nyari,

Greetings Envelope with each card 15/- per box of six.

No. 31

4/3 June Talc (tin) (2/9) 3 Bath Cubes (6d each)

No. 2059

SAVI COFF

BEAR NO BO

Saville PERFUMERY LTD

SHOWROOM: 16 SACKVILLE STREET, PICCADILLY, FACTORY: RICKMANSWORTH ROAD, WATFI



## FOR CHRISTMAS

/ERED



SILK-LINED
Perfume (3/9) Top-to-Toe (4/9)
Perfume Stick (4/9)

No. 1459

9/9

June Perfume (3/9)
Puffer Talc (3/6)
Hand Cream (2/6)

No. 359

Swill Brunn Place

Swill Brunn Place

Swill Brunn Place

Swill Brunn Place

12/-

Perfume (3/9)
Perfume Stick (4/9)
Puffer Talc (3/6)

No. 459

1DED

INGS

June

7/June Puffer Talc (3/6)
Hand Cream (2/6)
2 Bath Cubes (6d each)

No. 1959

9/6

Perfume with Spray of artificial Orange Blossom in transparent presentation.

No. 504



7/3
Perfume (3/9)
Puffer Talc (3/6)
No. 1859

NEW-

"PUFFER"

TALCS

BY SAVILLE

3/6 each No. 36

Silk soft perfumed Talc, containing a modern scientific deodorant. In four popular fragrances.

JUNE

MISCHIEF

ORANGE

BLOSSOM TALC

Saville

ORANGE BLOSSOM

SEVENTH HEAVEN

## **COUNTY LABORATORIES LTD**

## ANNOUNCE A CHANGE OF ADDRESS

Please note that as from

24th September 1959 the offices of

County Laboratories Ltd.

are transferred to:

# BEECHAM HOUSE GREAT WEST ROAD BRENTFORD, MIDDLESEX

Tel: ISLeworth 4171

All sales enquiries and orders should be made to this address



THE

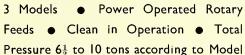


ROTAPRESS

TABLET COMPRESSING MACHINE

5,280
TABLETS
Per Minute

The Fastest Tablet Machine in the World



Generated Cam Tracks • New Internal Drive to Turret • Variable Speed Drive Revolutionary Overload Release • Dust Extraction Nozzles Fitted.

DOZENS OF NEW FEATURES

S					
гу	ABRIDGED SPECIFICATION				
al	Series	' 55 '	' 45 '	' 37 '	
el	Number of Stations	55	45	37	
al	Maximum Operation Pressure	61/2	61/2	10	
/P	Maximum Tablet Diameter	7/16"	5"	l"	

Write Today for Full Details

Maximum Filling Depth

Type of Punch

Type of Die

Output of Tablets (per minute)

## MANESTY MACHINES LTD.

SPEKE · LIVERPOOL 24

Telephone HUNTS CROSS 1972

Telegrams MANESTY, LIVERPOOL 24

11/16"

1080/4320

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13/16"

888/3552

11/16"

1320/5,280

В

**BB33** 

TABLET MACHINES · PUNCHES & DIES · GRANULATORS · MIXERS · AUTOMATIC WATER STILLS

BRINGS YOU A BETTER TURNOVER

New prices and terms effective from 5th October 1959

#### HERE IS THE STORY TO GREATE A TREMENDOUS NEW DEMAND

New formula Virol is a rich source of vitamins which growing children need. Mothers all over the country will read all about "the vital teaspoonful" of Virol in repeated big-space advertisements in National Daily and Sunday newspapers, the Provincial Press and leading Women's magazines. Sales will soar once this dramatic campaign opens. Make sure of your share of the larger profits in Virol. Order now.

#### ★Sales plus for Midlands stockists

A forceful TV campaign throughout the Midlands area will take the Virol story into thousands of homes, with 30-second commercials showing two and three times a week right through the Winter.

As a further aid to sales, attractive display material for Virol is available on request from:

BOVRIL LTD., OLD ST., LONDON, E.C.1

HERE ARE THE NEW TERMS NEW VIROL OFFERS YOU RETAIL PRICE

TRADE PRICE PER DOZ. JARS

MEDIUM MEDIUM

PER JAR

LARGE



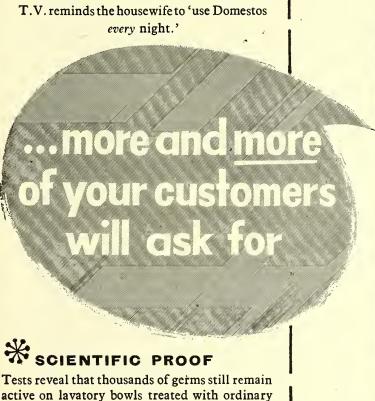
Because it is the **MOST EFFECTIVE** lavatory cleanser available.

Forceful advertising in the Press and on every night.'

cleansers, even after 18 hours. But, Domestos

kills all known germs within one hour.

The Brushless





DOMESTOS has the LARGEST SALE of any Liquid LAVATORY CLEANSER

## Now nights are turning cold

#### BIGGER DEMAND

Now's the time your sales go up. Customers who know how effectively Besorbon nips colds in the bud, now come back for more. Sales are maintained by personal recommendation between friends.

#### FREE DISPENSER

Stock Besorbon by the dozen and obtain the attractive counter unit free. By displaying Besorbon boldly now, you'll gain new customers-more profit.

it's big selling for

REGD. TRADE MARK

MEDICINAL SNUFF

Kemsales Ltd. · Eastcheap · London, E.C.3

## BURROUGH'S ABSOLUTE ALCOHOL

JAMES BURROUGH LTD. 1 CALE DISTILLERY LONDON S.E.11

#### **Top-Selling Rodenticides**

Rodine Phosphorus, Rodine Red Squill, Rodine Warfarin (Ready-to-use or Concentrate), and Special Rodine Mouse Warfarin. THOMAS HARLEY LTD., RODINE WORKS, PERTH, SCOTLAND

### Ask your wholesaler

he should have them in stock by now

#### THE **NEW** ONE-DOZEN NIGROID DISPLAYS

No more loose tins in sundries' drawers out of customers' sight and mind. Order the smart new one-dozen pack; display it on your counter and be ready to order the next one! It is small and attractively forceful. You will find that so many people only need reminding of Nigroids. DON'T ASK for "a dozen Nigroids." ASK FOR a "one-dozen Nigroid pack."

toilet soap for all who take extra care

Germicidal - Deodorant - Beautifying

ROBERTS WINDSOR LTD, LONDON, WINDSOR, NOTTINGHAM

#### SPECIAL NOTICE

Every user of Colostomy Appliances can have the "FRICKOL" IMPROVED COLOSTOMY BELT Pat. No. 71 3603 and the like, Specially designed by Mr. F. E. Fricker for the quick change of dressing or cup. The tiresome removal of the belt unnecessary and is used for many similar purposes. This patent is fully protected and is made only by us. The only belt of its kind in Great Britain. Messrs. F. E. Fricker Ltd., Surgical Truss and Belt and Colostomy belt makers, 138, Manchester Road, Bradford. Telephone No. 23625. Chemists are advised to write for particulars

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Prepared primarily for pharmacisus, the Dictionary is indispensable also for pharmaceutical manufacturers, advertising agents concerned with the marketing of medicinal products and indeed all who have to find their way around among the multifarious medicinal compounds of modern times.

Order direct from:

PRICE 17/6, Postage 94.

THE CHEMIST & DRUGGIST

28 EBSEX STREET, STRAND, LONDON, W.C.2



STOCK THESE NEW LIONITE ASHTRAY MIRRORS

A new style which has found a ready market. This combination with its elegant design and colour attraction, is finished in chromium plated frames with choice of base in red, pastel blue, luxan, pigskin or black leathercloths. Mirror detachable from base for safe packing. Individually boxed.

No. 35MFA mírror size 5 x 4 x 9/6 each plus 25% P.T. Retail Selling price 17/- each.

No. RM6FA 6" Dia. 12/3 each plus 25% P.T. Retail Selling price 22/- each.

No. RM7FA 7" Dia. 17/5 each plus 25% P.T. Retail Selling price 31/3 each

 Double sided, I side magnifying Obtainable from leading wholesale chemists





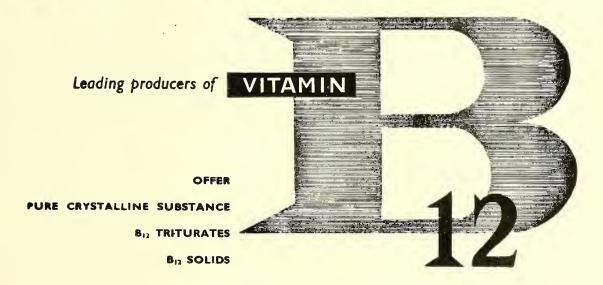
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### FOR ALL PHARMACEUTICAL PURPOSES

Pure -- stable -- high biological activity

Produced by streptomyces griseus fermentation



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The house of Woolley for all your requirements

**PHARMACEUTICALS** 



ETHICAL & PROPRIETARY
MEDICINES

CHEMISTS SUNDRIES



3

SURGICAL INSTRUMENTS

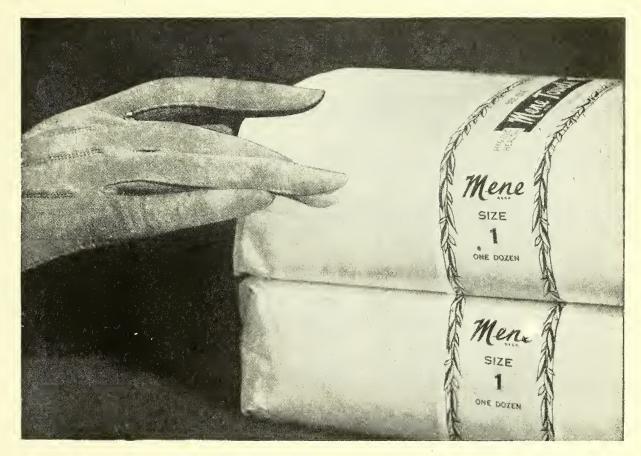
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JAMES WOOLLEY SONS & CO. LTD., VICTORIA BRIDGE, MANCHESTER, 3

Also depot, Nelson Street, Preston
Incorporating J. C. Arnfield & Sons Ltd., Stockport

# The quality that's taken for granted



Mene quality and value for money are two things acknowledged by women everywhere.

The utmost absorbency, super-soft comfort, economy, complete protection — Mene, over the years, has come to mean all these virtues to millions of women . . . to all *your* customers!

ROBINSON & SONS LTD.

CHESTERFIELD AND LONDON







A man who's tried a Ronsor and to shave any other way

HEAVY ADVERTISING

BOMBARDMENT!



Ronson's massive 13-week advertising campaign places its big guns to give maximum support to your Christmas sales.

**PEAK-TIME TV** Frequent hard-selling 45-second and 7-second spots show how much easier and more pleasant life is with a Ronson shaver...put over the 'Ronson for Christmas' gift story too.

NATIONAL PRESS Big-space shaver advertising, concentrated in the crucial gift-buying months, sells advantages of Ronson shaving, tells the 'Ronson for Christmas' gift story.

REMEMBER THE PASSWORD...

RONSON

RONSON

# CHRISTMAS SALES PLAN



Ronson are all set to launch their biggest, hardest-hitting Christmas campaign, starting September. **Objective**—to capture the Christmas gift market with more shaver sales than ever before. **Starting point**—your counter! **Ammunition**—forceful displays, special dealers' extended credit schemes, generous sales-incentive awards, 'Dozen-Plus' plan for local advertising, free trial and deferred terms arrangements.

Supply situation—good . . . but make sure you check your Ronson stocks today.

# FOR CHRISTMAS!



TELEPHONE: LEATHERHEAD 4444

Powerful
National
Advertising
to back your
sales of

40,000,000 readers will see these Ads. in the...

DAILY EXPRESS
DAILY MAIL
DAILY MIRROR
DAILY HERALD
NEWS CHRONICLE
THE SCOTSMAN

Aberdeen PRESS & JOURNAL Glasgow DAILY RECORD Dundee COURIER

REGISTERED

# SUB/AB/AB

TRADE MARK



WATCH
for this
SEAL
featured
in all
SUBA-SEAL
advertisements

# HOT WATER BOTTLES

this AUTUMN and WINTER

Make the most of this advertising—check your stocks of SUBA-SEAL Hot Water Bottles. NOW! This campaign is designed to move SUBA-SEAL from off your shelves—quickly this Autumn and Winter—so order NOW for early delivery.



watch your sales grow with SUBA·SEAL

WILLIAM FREEMAN & CO. LTD., SUBA-SEAL WORKS, BARNSLEY, YORKSHIRE, ENGLAND.

# IMPORTANT ANNOUNCEMENT

Beecham Foods Ltd., with their associates Harold F. Ritchie Ltd., issued this statement to the trade on Friday, 18th September, 1959

Beecham Foods Ltd., and their associates Harold F. Ritchie Ltd., have pleasure in announcing new prices and terms for Ribena, Lucozade, PLJ and Sun Orange Quosh, which they believe will be to the advantage of the public, the distributors, and the manufacturer.

From tomorrow, Saturday, 19th September:

1 We recommend a reduction of 3d in the retail prices of Ribena and the larger bottles of Lucozade and PLJ. These should now retail as follows: Ribena—3/6 plus 3d bottle charge. Large size Lucozade—2/3d plus 3d bottle charge. Large size PLJ—4/3d plus 3d bottle charge.

2 We are adjusting trade terms to ensure that over half of the total cost of these price reductions falls upon us. The new standard trade prices will mean that on the smallest order the retailer's margin will now be  $7\frac{1}{2}$ d on Ribena, 5d on a large bottle of Lucozade, and 9d on a large bottle of PLJ; and increased margins will operate, of course, for larger orders.

3 We do not propose to make adherence to these new prices a condition of sale. This revision of policy means that retailers will be freed from their current undertaking to maintain fixed retail prices for our beverages. These arrangements will apply only to beverages manufactured by Beecham Foods Ltd., comprising: Ribena, Lucozade, PLJ and Sun Orange Quosh. Our decision to relax conditions of sale is, we believe, in harmony with the present competitive spirit in the retail beverage trade. It has become increasingly evident that for some time past traditional profit margins are regarded by many sectors of the trade as liberal enough to permit of voluntary price reductions by retailers. Our new trade terms will help the small dealer, as well as the large, to co-operate with us in stabilising retail prices at the lowest practicable level. Our terms have been so adjusted as to ensure that we bear a substantially higher proportion of the costs of these consumer benefits than any one section of the trade, and on the aggregate over half the total cost of these consumer savings—likely to amount to over £750,000 in the next twelve months—will be borne by us.

We have no doubt that the public will readily recognise the advantages offered through these substantial reductions, and that it will not be long before both the trade and ourselves enjoy the benefit of expanded unit sales as a result...

Beecham Foods Ltd., Harold F. Ritchie Ltd.

NEW RECOMMENDED RETAIL PRICES
WITH EFFECT FROM SATURDAY, SEPTEMBER, 19th, 1959
(see announcement on facing page)



# LUCOZADE 2/6 now 2/3

plus 3d bottle charge



# RIBENA now 3/6

plus 3d bottle charge



# PLJ 4/6 now 4/3

plus 3d bottle charge

Harold F. Ritchie Ltd., Beecham House, Great West Road
BRENTFORD, Middlesex

# The Beatson Tablet

#### WHITE FLINT or AMBER

- ★ Distinctive SQUARE Shape.
- ★ Black Plastic or White Enamelled Caps.
- \* Production Clean in Sealed Cartons.
- \* Prompt Despatch from Stock.
- \* Available in the following sizes-3dr ½ ¾ 1 1½ 1¾ 2 3 3½ oz.



#### Suggested Packs-

½-oz.— 25 Aspirin.

1-oz. - 50 Aspirin or

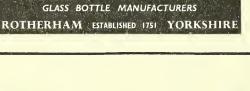
25 Codeine.

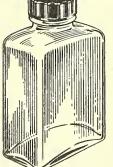
13-oz.-100 Aspirin or

50 Codeine.

31-oz.—100 Codeine.

Beatson, Clark & Co., Ltd.























# Caffeine

Caffeine Sodium Salicylate
Caffeine Sodium Benzoate
Caffeine Citrate

# Theophylline

Theophylline-Ethylenediamine

Oxyethyltheophylline

Dihydroxypropyltheophylline

Oxypropyltheophylline

8-Chlorotheophylline



C. H. BOEHRINGER SOHN - INGELHEIM AM RHEIN

# four very good reasons...

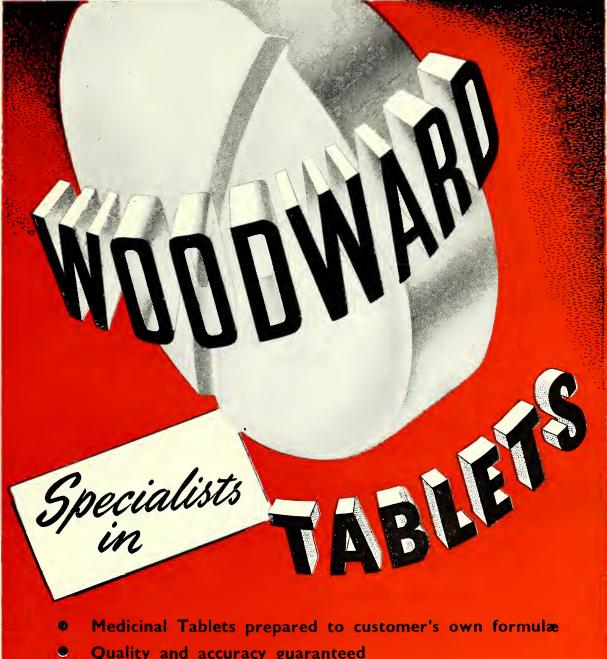


- DEVELOPED BY DOCTORS for correct feeding action and jaw development
- APPROVED BY MOTHERS
   Britain's top selling Teat now and for many years because of its essential softness and freedom from trouble
- BACKED BY CONSTANT ADVERTISING Three times more advertising this year than ever before
- AND SOLD THROUGH CHEMISTS ONLY Because this is Maw's unchanging policy

...for selling



teats!



- Quality and accuracy guaranteed
- Modern Plant Prompt Delivery

HOME AND EXPORT ENQUIRIES INVITED

# G. O. WOODWARD & CO., LTD.

MANUFACTURING CHEMISTS

LARKHALL WORKS, MORRISH ROAD, BRIXTON HILL, LONDON, S.W.2

Telephone: TULSE HILL 9481-2-3



## Coming to your counter now...

# new customers for Lillets ENORMOUS NEW Lillets ADVERTISING CAMPAIGN

Woman · Woman's Own — NOW JOINED BY — Woman's Mirror Woman's Weekly · Sincerely · Wife & Home · Woman & Home Woman & Beauty · She · True Magazine · My Home · Vanity Fair

#### BETTER ARRANGE FRESH DELIVERIES NOW:

LILIA-WHITE (SALES) LTD. 256-260 OLD STREET, LONDON, E.C.1.

Lil-lets o.b. plus (retail 2/-) and in fives (retail 1/-)

Lil-lets o.b. (retail 1/6) and in fives (retail 9d)





Oh, Pam! Why not? Gracious, that shouldn't bother you if you use Lil-lets Oh, well. Come another time



what you said about Lil-lets. Do they really work, Sue? And are they well, quite safe?"



Of course! They expand midihinaus, can't press on any nerves so they're blissfully comfortable, absolutely safe."



Thought you were never coming Look, the weather's good, what about Druid's Oak? It's only five miles



I must say I'm grateful to you for suggesting Lil-lets, Sue. Today feels just like any other day of the month!"



Lil-lets normal 1/6 for 10 Lil-lets plus 2/- for 10

If you would like to try Lillets FREE, write to Sister Marion, Lilla-White (Sales) Ltd., 256-280 Old Street, London E.C., for a sample sent together with a FREE booklet in a plain envelope.



Starring extra 5% + 10% bonus discount for one month only- $1_{s1}$ - $31_{s1}$  October



# Four big features-

CHOOSE YOUR PROFIT-MAKING PROGRAMME

Parcel 'A'
6 doz 10's
4 doz 20's
2 doz 50's
cost £11.10.6
BONUS PROFIT
£7.0.0

Parcel 'B'
6 doz 10's
COST £3.13.1
BONUS PROFIT
£2.9.5

Parcel 'C'
6 doz 20's
cost £5.19.4
BONUS PROFIT
£3.7.8

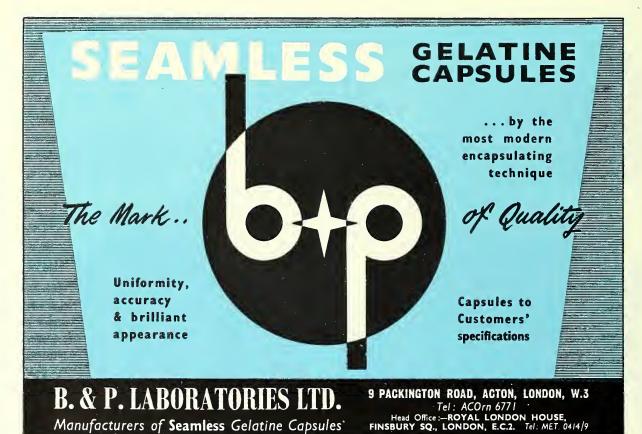
Parcel 'D'
3 doz 50's
COST £5.16.9
BONUS PROFIT
£3.8.3

- All orders are delivered direct from us, but you can be invoiced through your usual wholesaler.
- You may order any number of parcels during the bonus month.

NOW for delivery on 1st October



WILLIAM R. WARNER & CO. LTD., EASTLEIGH, HAMPSHIRE.



Samples and literature on request



Telephote: Terminus 617, 1618

Telegrams: 'Sergurg, Smith, London' Cables: A.B.C. and Bentleys

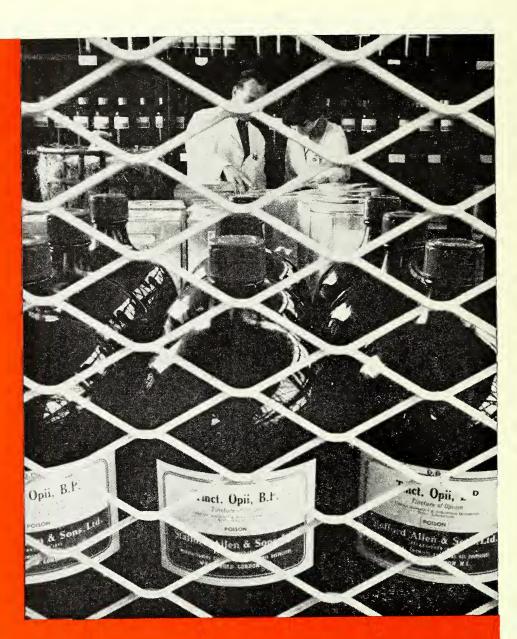


Our ever-expanding advertising campaigns in the national, provincial and magazine press are constantly stimulating new sales, which mean new customers for you!

Here are five examples of our new plastic processed Showcards. All are in full colour and are eye catching, appealing and decorative.

We shall be pleased to send you display matter if you will let us know your requirements. Attractive "G" Brand Showcards are also available.

Please address your enquiries to



As one of the largest manufacturers of galenicals in Gt. Britain StaffordAllenS are supplying increasing quantities to wholesalers and manufacturers. Now all lines are offered packed and it remains the policy of the Company to supply only wholesalers and manufacturers. StaffordAllenS maintain substantial stocks and prompt delivery is always

assured.

Liquid Extracts, Emulsions,
Tinctures, Infusions,

Liquors,
Syrups,

Decoctions, Elixirs etc.

STAFFORD ALLEN & SONS LTD

Wharf Road, London, N.1
Tel: CLErkenwell 1000

Grams: Stafalens, Nordo, London



StaffordAllenS



## from

# Sangers

and their associated companies

May, Roberts & Company Limited London Liverpool Plymouth

Thomas McMullan & Company Limited
Belfast

Southall Bros. & Barclay Limited Birmingham

Hirst, Brook Goodalls Limited Leeds

John Thompson Limited Liverpool

**Broo**ks & Warburton Limited Surrey

Chemists' Supply Company Limited Bournemouth

Francis Newbery & Sons Limited Cardiff

# Here's a product promise with

# **Bronchipax**

Sell-out in
Newcastle for
new scientific
one-dose
bronchial remedy

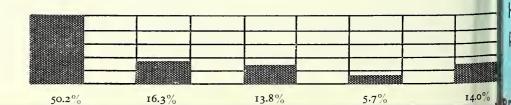
N — A product of Nicholas Research

Initially launched a few months ago in Newcastle-upon-Tyne, new formula 'Bronchipax' proved an overwhelming overnight success. Local advertising and shop displays brought an immediate response from chest sufferers which has grown steadily ever since. Read what Newcastle chemists say about 'Bronchipax':

- "Could have sold three dozen packs on the first day. Completely sold out. Staggering."
- "One of the best bronchial remedies."
- "The first half dozen went very well and had to be repeated quickly."
- "Most successful."
- "A number of repeat orders through personal recommendation."

HERE ARE THE FIGURES TO BACK UP THE CLAIMS

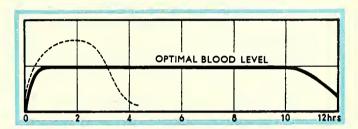
This is how the Newcastle market was shared only 3 months after the introduction of 'Bronchipax'.



# hat backs up its PROOF

# Here's the reason for this phenomenal success

A new medical discovery—Ephedrine Resinate—lies behind the lasting effect of 'Bronchipax' which eliminates the frequent dosage necessary with most other bronchial remedies. Ephedrine Resinate gives fast-acting level-action relief. One dose maintains a reserve in the system to keep bronchial tubes dilated for up to 12 hours easy breathing, giving invaluable extended relief which with Ephedrine alone is impractical.



New scientific one-dose 'Bronchipax' brings up to 12-hour relief

This graph shows you how much longer 'Bronchipax' action lasts. See how the older remedy (dotted line) quickly loses its effectiveness. But 'Bronchipax' (heavy line) acts quickly, acts surely, acts without interruption.

### Here's the promotion to make BRONCHIPAX a NATIONAL best-seller

'Bronchipax' will now be nationally distributed throughout the British Isles, supported by a full-scale advertising campaign which opens in October with dramatic big-space announcements in:

# DAILY EXPRESS DAILY MIRROR DAILY HERALD NEWS OF THE WORLD EMPIRE NEWS

#### TV on all Stations, too!

Commercial TV announcements in *all* areas will bring the good news of 'Bronchipax' right into the homes of millions of 'chesty' viewers—will show them how to get a better night's rest, every night, by taking one-dose 'Bronchipax' regularly.

A total of £60,000 in the first 6 months' launching period is being spent—over £46,000 more than was spent by the biggest advertiser in this field for the whole of last year.

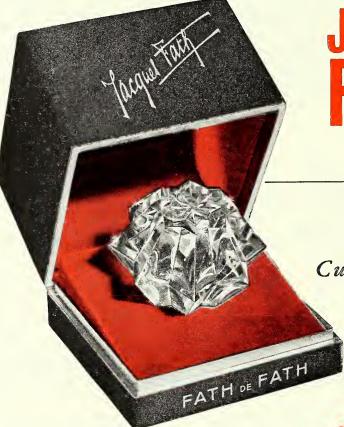
Here's how you can profit from stocking up with Bronchipax'

	AT BEST TERMS	AT TRADE PRICE	
You Spend	£5 • 13 • 10	£6 • 10 • 0	
You Get Back	£9 • 6 • 0	£9 · 6 · 0	
You Profit	£3 · 12 · 2	£2 • 16 • 0	

Build up a stock of BRONCHIPAX now!
Once the news breaks about this long-needed extended-action bronchlal remedy, you'll need plenty to satisfy the big demand and regular repeat orders that will come from all chest sufferers among your customers.

RRONGHIPAY' WILL RE ON CALE TO THE NATION FROM COTORED 424

## The Perfumes and Cosmetics of



# JACQUES FATH



Announcement by

Cullingford of Chelsea

Sole Distributors in the U.K.

for the products bearing

the famous name

'Jacques Fath'



The FATH range includes:

Perfumes: Fath de Fath, Canasta, Iris Gris. With matching Toilet Waters and Colognes.

Lipsticks: 12 shades. Including Bettina, Olivia, Francoise, Michele.

Nail Lacquers: 12 shades to match the lipsticks and 4 frosted shades.

- Additional stockists are now being selected.
- Stockists are supplied with impressive display material, dummies and testers.
- Striking advertisements will appear shortly in the leading women's magazines.

Enquiries are invited and our representative will be pleased to call. Please write for samples and prices.

#### **CULLINGFORD OF CHELSEA**

LONDON OFFICE:

MUNROE HOUSE · DENBIGH STREET · LONDON S.W.I VICTORIA 0566/7

LIVERPOOL OFFICE:
KIRKBY · LIVERPOOL
SIMONSWOOD 3256



FREE SHOWCARDS, LEAFLETS, BLOCKS

direct from the manufacturers Modern Electrical Industries Ltd., Knottingley, Yorkshire.

Tie up with Warmabed for another record year

## This spiral can only mean one thing:

# more Sebbix

more advertising more sales

more advertising

more sales

We are moving up strongly this year on a planned sales spiral, with more SEBBIX advertising on TV and more SEBBIX advertising in the National Press. What's behind the advertising?—Solid groundwork:—three years of research... testing...perfecting...First SEBBIX Liquid, then SEBBIX Cream Shampoo... Doctors who tested it recommend it; and many people who first used it on medical advice now use it for the sheer beauty of clean, lustrous hair. Increased advertising on top of increasing popularity can only lead to one thing: expansion. Results of this will be felt

by every SEBBIX Stockist, new or long-standing.

Here is your great opportunity to increase sales —

Take advantage of it! Stock, display and recommend SEBBIX now!



more advertising

GENATOSAN LIMITED, LOUGHBOROUGH, LEICESTERSHIRE





#### Alkaloids and Salts

DIGITOXIN, EPHEDRINE, ERGOTAMINE. QUININE, SANTONIN, STRYCHNINE, THEOBROMINE.

#### Hormones

CORTISONE, HYDROCORTISONE, ETHINYL OESTRADIOL, METHYLTESTOSTERONE, OESTRADIOL, PROGESTERONE, PREDNISONE, TESTOSTERONE, Etc.

#### Fine Chemicals

ACETAZOLAMIDE, AMIDOPYRINE, BARBITONE, BENACTYZINE, DICOUMAROL, FOLIC ACID, MEPROBAMATE, PAS SODIUM, PHENOBARBITONE, PHENACETIN, PIPERAZINE CITRATE, PIPERAZINE HEXAHYDRATE, SULPHANILAMIDE, SULPHATHIAZOLE, TOLBUTAMIDE, VITAMINS B<sub>1</sub> and B<sub>12</sub>, WARFARIN.

### LAKE & CRUICKSHANK LTD.

MANUFACTURING CHEMISTS

NORTH BRIDGE ROAD · BERKHAMSTED · HERTS

## The name that quarantees accuracy

- CLINICAL THERMOMETERS
- HOUSEHOLD THERMOMETERS
- INDUSTRIAL THERMOMETERS

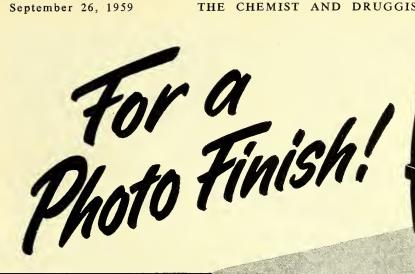
## G.H.ZEAL

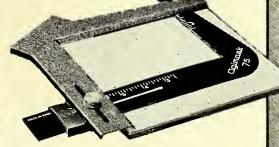
LOMBARD ROAD · MORDEN ROAD · LONDON · S·W·19

Telephone: LIBERTY 2283 · 4 - 5 - 6 and 4201 Cables: "Zealdom" London









A brilliant new design --- very simple but immovably rigid. For all sizes from 2½" sq. to 7" x 5". Ideal for postcard enlargements. Fixed margin of &".

7" x 5" £1 · 5 · 0

A single movement simultaneously adjusts both margins from in to I".

12" x 10" £5

AGIMASK

10" x 8" £4 · 2 · 6

The most modern enlarger of them all. Complete with lens, film carrier and a set of masks covering all sizes from 35 mm to  $2\frac{1}{4}$  x  $3\frac{1}{4}$ .

The enlarger everyone can operate -at a price everyone can afford.

> Only £6.5.0 Complete

Ask your wholesaler for details





is ringing up more profits each week than any other Hair Colouring

COLOR-GLO has created a new fast-growing market for semi-permanent hair colouring. COLOR-GLO is safe, simple and effective to use. Natural-looking with no risk of extreme results. That's why it sells better than any other hair colouring. When women see you've got COLOR-GLO they'll buy. And be back—regularly—for more. So don't just stock COLOR-GLO, display eye-catching COLOR-GLO packs and showcards—and link up with the biggest ever COLOR-GLO advertising campaign

And now...
an even wider market with BLACK TULIP (Deep Burgundy)

Anew shade fordark hair giving a beautiful, deep, muhogany tone

Biggest ever Color-Glo advertising is this year reaching over 17,000,000 women.

## Color-Glo

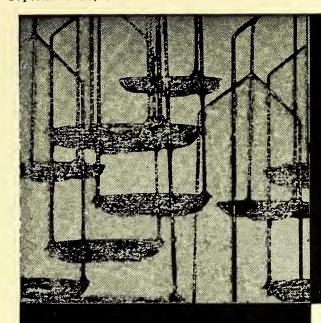
The effect lasts through 6 to 8 shampoos

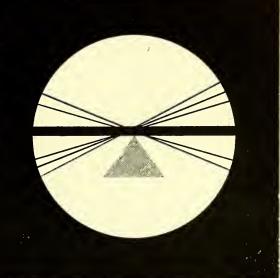
SEMI-PERMANENT HAIR COLOURING

A creation of L'OREAL · PARIS

GOLDEN LIMITED · 7 GROSVENOR STREET · LONDON W.1 · HYDe Park 1671/6

Republic of Ireland enquiries to Lilmar Pharmaceuticals Limited, Santry, Dublin.





In line with the latest trends in rheumatic therapy

#### Delta-Butazolidin®

(Butazolldin<sup>®</sup> 50 mg., prednisone 1.25 mg.)

Available for the first time in General Practice

Minimizes the risk of hormonal imbalance

Four definite advantages in the treatment of rheumatism

- Two of the most Important antirheumatics In a single tablet, giving additive therapeutic action
- Low maintenance dose minimizes the risk of hormonal side effects
- Rational proportion of each component permits simple and yet individual treatment
- Sultable for severe cases and for long-term maintenance therapy



Geigy

Availability
(Basic N.H.S. prices)

Containers of

30 tablets . . 10s. 8d. 150 tablets . . 52s. 0d. 500 tablets . . 157s. 0d.

PH 143



#### He's some baby when it comes to selling!

He's the star of the brightest-ever Gillette Christmas campaign—to bring you your greatest-ever sale of Gillette razors and blades as gifts. This £70,000 campaign is concentrated in the 4 pre-Christmas weeks. That's advertising at

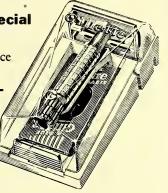
the rate of £17,000 per week, £1 million per year!

Large-space advertisements in the press and punchy commercials on TV, all featuring the Gillette baby, will reach over 93% of people in Great Britain.

## He'll help you sell the GILLETTE **5 STAR CHRISTMAS RANGE**

#### ★ Gillette 60 Special

Already a proved success! Lowest price ever for a Gillette one-piece razor. 5/-



#### ★ Gillette Travel Set

Highly finished one-piece razor in handsome pigskin-style travel case with dispenser of 6 Blue Gillette blades.

13/6



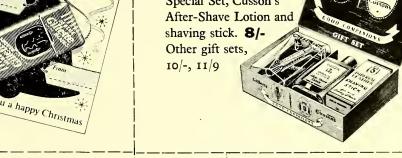
#### \* Dispenser of 10 **Blue Gillette** blades on gay gift card

Ideal small gift for tree or stocking. 10 blades 3/3



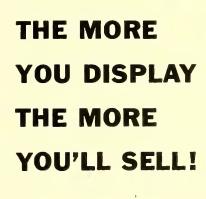
#### **★** Good Companions Gift Set

Contains Gillette 60 Special Set, Cusson's shaving stick. 8/-Other gift sets, 10/-, 11/9



#### ★ Gillette **Presentation Set**

New! A magnificent gold-plated one-piece razor in presentation case with dispenser of 10 Blue Gillette blades. 25/-





atrix

Supported by full and half pages in leading magazines

## spearheads

## launch campaign for

## Newatrixo

THE MIRACULOUS TRIPLE-ACTION

HAND CARE DISCOVERY

Dynamic whole pages in leading magazines—Woman, Woman's Day, Woman's Realm, Woman's Weekly and Woman's Illustrated—plus an entire half page in the Daily Express, make the first impact with the ATRIXO story in September-October.

#### THREE-WAY BEAUTY

Sensational new ATRIXO works three ways to make hands lovelier... protects... beautifies... and lets the skin breathe at the same time! Used before and after every messy job, the merest film of ATRIXO keeps hands pretty all the working day.

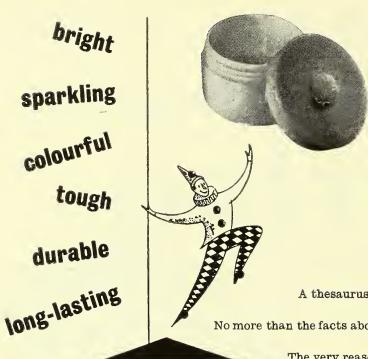
ATRIXO advertising goes full steam ahead right through the winter, keeping interest at its peak. These advertisements will be seen by millions of women during the cold months when hands need more care than ever, so be sure you have ATRIXO in stock when they come to ask for it.

#### STAGE A GAY DISPLAY

New ATRIXO comes to you in pleasing tins and dispensers, planned to make an attractive, compact splash of colour on your counter. Showcards and window stickers help to arrest attention and tie in your display with the national advertising. Remember, ATRIXO care is complete care . . . all the care a woman's hands can ever need. Place your order NOW.







A thesaurus of adjectives? . . .

No more than the facts about Styron Polystyrene.

The very reasons why packaging experts

choose this versatile plastics material

for the perfect presentation of

transparent

translucent

opaque

hygienic

non-toxic

non-rusting

cosmetics and drugs.

Please write for Booklet No. 229.



\* trade mark of the Dow Chemical Company



Containers made by Hyde Plastics Ltd using Styron Polystyrene



BRITISH RESIN PRODUCTS LTD

SALES AND TECHNICAL SERVICES DEVONSHIRE HOUSE PICCADILLY LONDON W1 HYDE PARK 0181



### **Pioneers in Penicillin**

The new prices current from August 1st, 1959

## The 'ICIPEN' V and 'PENAVLON' V range of Penicillin V preparations—the most efficient oral penicillin

TRADE PRICE

#### 'ICIPEN' V tablets

300 mg. (0.5 m.u.)

#### **'ICIPEN' V Suspension**

150 mg. (0.25 m.u.) penicillin V per teaspoonful of prepared suspension.

Containers of 1 fl. oz. (when dispensed) . . . . . 8/- each Containers of 2 fl. oz.

(when dispensed) .. .. 14/2d. each

TRADE PRICE

#### 'PENAVLON' V tablets

Penicillin V potassium salt

Scored tablets (a) 125 mg. (as potassium salt)

Scored tablets (b) 250 mg. (as potassium salt)

#### 'SULMEZIL' V — for combined penicillin and sulphonamide therapy

TRADE PRICE

#### 'SULMEZIL' V tablets

Each tablet contains **0.5** gramme 'Sulphamezathine' (sulphadimidine B.P.) and 60 mg, penicillin V as calcium salt.

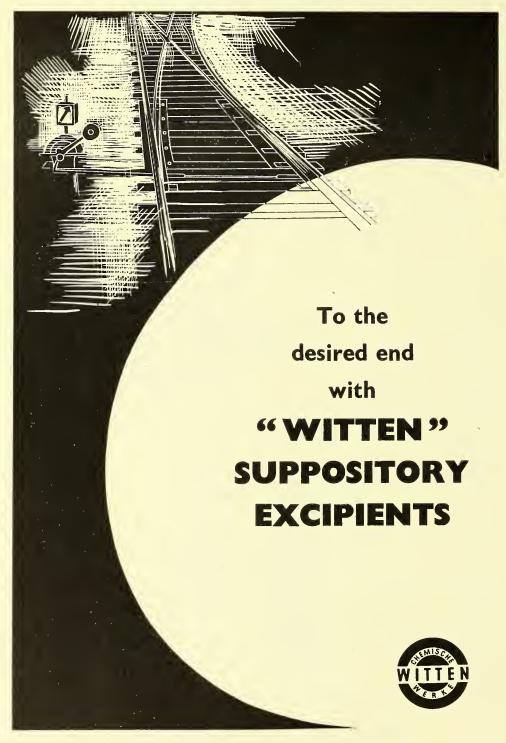
 TRADE PRICE

#### **'SULMEZIL' V** suspension

Each teaspoonful (3.5 ml.) of prepared suspension is equivalent to one 'Sulmezil' V tablet.

Bottles of 2 fl. oz. .. 8/- each

IMPERIAL CHEMICAL INDUSTRIES LIMITED Pharmaceuticals Division Wilmslow Cheshirs



U.K. Distributors

CHEMICALS TRADING COMPANY LTD., Cree House, 18/20 Creechurch Lane, London, E.C.3

Tel: Avenue 5488.

Chemico London

### NEURAL THERAPY

Considerable publicity is now being given in the lay press to Neural therapy. This has resulted in numerous enquiries regarding the use of a procaine/caffeine combination to relieve —virtually instantaneously—intolerable painful conditions. In these circumstances we feel it desirable to advise the profession that the original German product manufactured by Farbenfabriken Bayer AG. is obtainable in Great Britain through F B A Pharmaceuticals — in the following presentations:—

#### PROCAFIN

Ampoules (2 ml.)—5's

Ampoules (5 ml.)-5's

#### DEPOT-PROCAFIN Ampoules (2 ml.)—5's

Ampoules (5 ml.)—5's

Our own publication "Procasin in Neural Therapy" is available on request.

#### PHARMACEUTICALS LIMITED

37/41 Bedford Row, London, W.C.1.

Sole distributors for FARBENFABRIKEN BAYER AG., LEVERKUSEN, GERMANY.

## Freddie Trueman THE NEW

## TV CAMPAIGN BEGINS SEPTEMBER 5TH WILL AVERAGE 20 MILLION VIEWERS EVERY WEEK

This is the TV campaign everyone will talk about: Freddie Trueman, idol of Yorkshire and England, will demonstrate the speed and power of the New Remington by shaving off his tough beard in hard-hitting Remington one-minute commercials. Freddie Trueman grew this beard specially to help all Remington dealers sell the shaver with the biggest profit.



#### FULL-PAGE AND FULL-PAGE-BY-4-COLUMN ADS IN THE DAILY MIRROR

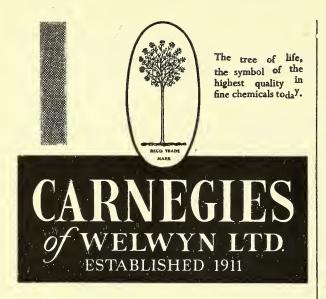
will feature these famous sporting personalities: Freddie Trueman, John Surtees, Mel Charles and Jimmy Hill.

## LINK UP WITH THIS TREMENDOUS CAMPAIGN

using striking display material and dealer advertisements; Send now for details.

## will help you sell REMINGTON





#### Manufacturers and Suppliers of

**ADRENALINE** ADRENOCHROME MONOSEMICARBAZONE ALPHANAPHTHYL ACETIC ACID **AMINOPHYLLINE BISMUTH SALTS** BRUCINE AND SALTS CAFFEINE AND SALTS CHRYSAROBIN EPHEDRINE AND SALTS HYDANTOIN DERIVATIVES IODIDES ISOPRENALINE SALTS METHOIN NORADRENALINE AND SALTS P.A.S. SODIUM PIPERAZINE AND SALTS RESERPINE SANTONIN STRYCHNINE AND SALTS THEOBROMINE AND SALTS THIOMERSALATE QUININE AND SALTS CINCHONA FEBRIFUGE TOTAQUINA

#### CARNEGIES OF WELWYN LTD. Welwyn Garden City, Hertfordshire, England

Phone: WELWYN GARDEN 5001 (10 lines) Cables: CARNEGIES, WELWYNGARDENCITY

Telex: LONDON 28676

#### And now, the new SELF-ILLUMINATING MICROSCOPE -it's brilliant! LOOK AT THESE FEATURES, THEN LOOK AT THE PRICE 4 objectives on rotating turret • 100x, 200x, 300x, 400x Magnifications guaranteed in accordance with N.P.L. report F. 1626 of 18 . 8 . 59 Reversible automatic light and mirror assembly 2 U.i2 cells in base

RETAIL PRICE COMPLETE

case and 3 slides

wooden

Fitted

£6.12.6

with batteries, bulb and case

A new "Stein" Microscope with the features of a professionally styled instrument plus the most ingenious illuminating method ever. Turn the mirror reflector over, and the fitted bulb lights automatically to spot-light the specimen being studied. With two standard batteries within the base, fitted wooden case and 3 plain slides this sales-compelling and very efficient microscope is going to make first-class business the year round.

Order now for early delivery.

Full trade discounts

Enquiries from wholesale houses invited

Leaflets and display cards available

#### **PURSERS LONDON**

(HOLBORN)

12, FULWOOD PLACE, LONDON, W.C.I Telephone: HOLborn 5268

## VALUABLE COMBINED

#### BONUS OFFER

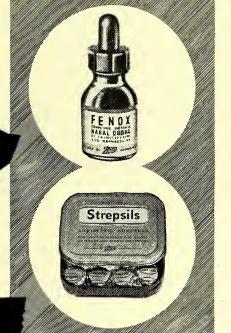
PARCELS CONTAINING

3 dozen

FENOX

plus 2 dozen

Strepsils



**FENOX** 

Nasal Drops Retail Price 2/6 ½fl. oz.

**STREPSILS** 

Antiseptic Lozenges Retail Price 2/6 per tin

for only

(plus 8/4 P. Tax)

At this price, in every parcel you are getting the equivalent of

3 FREE bottles of FENOX and 2 FREE tins of STREPSILS

There is no limit to the number of parcels you may order.

This offer is open from Sept. 14th to Oct. 10th

Order now, from your usual wholesaler, to meet the certain winter prescription demand.



## When your customers ask for 'vitamins'...

#### For general purposes

for nutritional support in convalescence or because of prolonged ill-health, BEMAX is particularly recommended.

For BEMAX contains a high proportion of protein (27%), vitamins of the B-complex and E, together with important minerals such as iron. Easily digested and readily taken with a variety of foods, it is invaluable at all age levels.

#### BEMAX

Packs of 5, 10 and 20 ozs.

#### For children and the elderly

and for the febrile, VITAVEL SYRUP is specially valuable. It is water-miscible and has a most attractive taste, readily acceptable to children and others who dislike fish-liver oils. It is a combination of the important vitamins, A, B<sub>1</sub>, C and D in an orange-flavoured syrup base.

#### **VITAVEL SYRUP**

Basic price to N.H.S. 6 fl. 02s. 2/6, 40 fl. 02s. 16/-.

#### For pregnancy and lactation

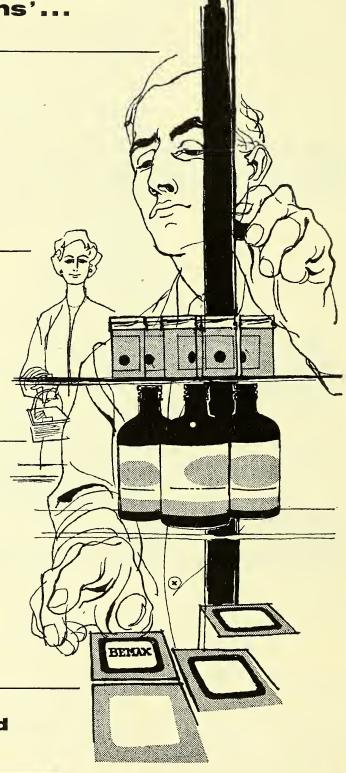
The special nutritional needs of the pregnant and lactating mother have been met in PREGNAVITE which has found favour with the medical profession for more than 20 years. This preparation supplies just those vitamins and minerals which are needed in increased amounts during pregnancy and lactation, in the quantities estimated to be needed in addition to normal dietary supplies.

#### **PREGNAVITE**

Packs of 60, 120 and 1,000. Basic price to N.H.S. 1,000 tablets 32/9.

## ... recommend a product from





(DEPT. A.A.6.) UPPER MALL, LONDON, W.6.



### A powerful synergistic combination

#### TARCORTIN CREAM

For sub-acute and refractory skin affections

Treatment of sub-acute and refractory skin affections can now be considerably enhanced by combining tar, an established germicide, stimulus and anti-pruritic, with hydrocortisone as in TARCORTIN. Together, the medicaments have pronounced advantages over either one alone.

TARCORTIN CREAM is non-greasy, stainless and hydrophilic and is supplied in 7 grm. and 15 grm. tubes containing 0.5% Hydrocortisone in a special coal-tar extract.

#### STAFFORD - MILLER



contains: 5% special coal

tor extract

15% hydrocortisone



## FOR THE PHARMACEUTICAL INDUSTRY

FULL TECHNICAL INFORMATION ON REQUEST

LIGHT AND HEAVY MAGNESIUM

LIGHT AND HEAVY MAGNESIUM OXIDES B.P.

MAGNESIUM OXIDE LEVISSIMA
MAGNESIUM HYDROXIDE B.P.C.
MAGNESIUM TRISILICATE B.P.

#### THE WASHINGTON CHEMICAL CO. LTD.

WASHINGTON, CO. DURHAM, ENGLAND

Telephone: Washington 3333

A member of the TURNER & NEWALL ORGANISATION

### Important

### ANNOUNCEMENT

The isolation of the penicillin "nucleus" — 6-amino penicillanic acid—by the Beecham Research Laboratories heralds a new phase in the growth of the British pharmaceutical industry. To enable new antibiotics to be developed and produced with the least possible delay, BEECHAM RESEARCH LABORATORIES LTD. has now been expanded, so as to integrate research, pharmaceutical manufacturing, distribution and administration into one company.

C. L. BENCARD LTD. will be incorporated in this new organisation and former Bencard products will continue to be available. Use of the Bencard name will in future be confined to the well known range of allergy preparations.

The products of Beecham Research Laboratories Ltd. will not be advertised to the public and will be available on N.H.S. prescription.

NACTON · PRODEXIN · PHENIDEX

PAYNOCIL · FERRAPLEX B · BENAZMA

BENCARD ALLERGY PRODUCTS

## BEECHAM RESEARCH Laboratories Ltd.

HEAD OFFICE & PHARMACEUTICAL DIVISION: Great West Road, Brentford, Middlesex

BENCARD ALLERGY DIVISION: Great West Road, Brentford, Middlesex

Telephone: ISLeworth 4111 • Telegrams: Research, Brentford, Hounslow

RESEARCH DIVISION: Brockham Park, Surrey



## ECOMYTRIN

for the treatment of bacterial skin infections

**ECOMYTRIN** contains amphomycin 0.5% neomycin B base 0.33% in a special non-greasy, water-miscible base.

**ECOMYTRIN** is subject to the provisions of the Therapeutic Substances Act and may be supplied to the public only on prescription.

**ECOMYTRIN** will be brought to the notice of the medical profession with mailings and journal announcements; our representatives will be discussing this product with doctors.

Prescriptions for ECOMYTRIN can safely be anticipated

## ECOMYTRIN

ointment



#### Wholesalers now have stocks

PACK: cartoned tubes each containing 15 G.
TRADE PRICE: 60/- per dozen, exempt Purchase Tax

Technical literature is available on request





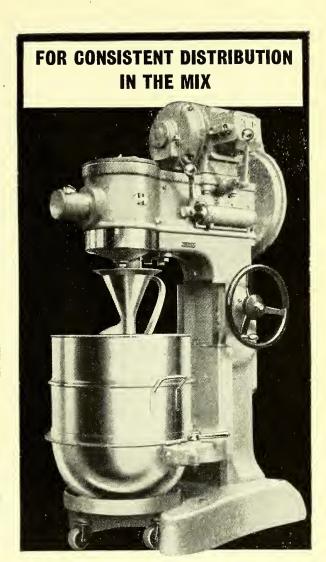
the short drink to health

RETAIL PRICE

Guavin is a delicious blend of the juices of South African guavas and sweet black grapes. It is richer by far than orange or blackcurrant juice in natural Vitamin C and rich, too, in energy-giving fruit sugars. No other fruit drink contains so much natural goodness.

Available through your wholesaler

PASCALL-KNIGHT LTD. (Est. 1931), CROYDON, SURREY



#### -you need the superb efficiency of a planetary action Hobart Mixer

Hobart Mixers ensure the very best results, whatever the ingredients - even the most impermeable. Recent tests at British Quarries, where a Hobart mixer was employed, showed on analysis that, on a mix of 96% stone chippings and 4% bitumen, the bitumen content of any part of the batch was between 3.9% and 4.1%.

There are six Hobart **Planetary Action Mixers - capacities** from 10 to 100 quarts.



Send for full details

#### The HOBART MANUFACTURING Co. Ltd.

HOBART CORNER, NEW SOUTHGATE, LONDON, N.II

Telephone: ENTerprise 1212

Divisional Offices and Service Depots at : BELFAST 45770. BIRMINGHAM: Midland 1518/9. BRISTOL 20208. CARDIFF 30546. DUBLIN 77212. GLASGOW: Shettleston 3471/2. LEEDS 27665. LIYERPOOL: Royal 3254. MANCHESTER: Ardwick 1169. NEWCASTLE-ON-TYNE: Low Fell 7-5279. NOTTINGHAM 84771.

### For CHRONIC BRONCHITIS



#### AND ASTHMA

Very profitable and regularly repeating counter sales can be built up with Eupinal, a line which has been successfully prescribed for many years.

We have received many letters of gratitude from sufferers who have obtained relief, and recommend you to feature this line prominently

this Autumn and Winter.

Eupinal contains the valuable properties of Caffeine with those of Iodides in an effective and stable form, and is suitable for children and adults. It is not a sedative and contains no poisons. In addition to being safe, it is effective—relieving mild Broncho-spasm and acting as an expectorant, thus helping to check the course of the disease.

## EUPINAL

FROM CHEMISTS ONLY

4 ozs. TRADE: 28/- + 7/- P.T. Doz. Retail 4/2 each. 8 ozs. TRADE: 50/- + 12/6 P.T. Doz. Retail 7/4 each. Also available with Ephedrine.

A PRODUCT OF Cixson, Gerrarde Co. Ltd. oldbury, Birmingham



## stop scratching

## start healing

CHLORMYTOL\* is an ointment combining the antibacterial action of CHLOROMYCETIN with the anti-inflammatory and antipruritic actions of prednisolone. CHLORMYTOL contains 2% CHLOROMYCETIN\* (chloramphenicol B.P., Parke-Davis) and 0.5% prednisolone in an emollient petrolatum base.

## **Chlormytol Ointment**

available in tubes of 5 and 15 g.

PARKE-DAVIS



PARKE, DAVIS & CO. LTD. (INC. USA.) HOUNSLOW, MIDDLESEX. TEL: HOUNSLOW 2361

Trade mark



JOHNSONS OF HENDON LTD

**CHEMICALS** 

September 26, 1959

THE CHEMIST AND DRUGGIST

## SPECIAL AUTUMN BONUS

on these 3 easy-selling ANGIERS products





September 26, 19



Entirely free to you-every 12th sale of any of these Angiers products

You get 1 free item in every dozen on all orders for Angiers products exceeding £7.10.0 list price

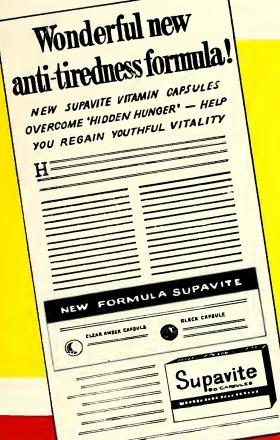
+5% DISCOUNT

Offer closes October 31st

for 14-day prominent window display

Order your stocks NOW

## Big new advertising to speed sales



#### **PRESS**

Beginning Autumn, dominating advertisements for Angiers Supavite regularly in mass-circulation Sunday newspapers:

SUNDAY EXPRESS
SUNDAY DISPATCH
SUNDAY GRAPHIC
SUNDAY TIMES
OBSERVER

and in influential magazines:

RADIO TIMES
READER'S DIGEST
WOMAN'S OWN

Emphasising NEW Anti-Tiredness Formula.

#### TV

New series of frequent and dynamic short TV spots for Angiers Junior Aspirin on main network stations in addition to continuing series of regular 30-second commercials.

Regular Junior Aspirin press advertisements, too, in big-circulation women's magazines, in specialised family-doctor and parent magazines, and in professional medical, nursing and dental journals.



Specially
MADE
for
Children!

Post the reply-paid order card TODAY

#### **Price List**



#### **Angiers Emulsion**

Medium Size . . . 30/- per doz. Retail Price 3/10d. each (inc. P.T.)

Family Size . . . 50/4d. per doz. Retail Price 6/6d. each (inc. P.T.)

#### **Angiers Junior Aspirin**

Bottles of 50 tabs . . . . 11/- per doz. Retail Price 1/7d. each (inc. P.T.)

#### **Angiers Supavite**

Boxes of 30 capsules . . . 43/6d. doz. Retail Price 5/- each (No P.T.)

Boxes of 60 capsules . . . 78/4d. doz. Retail Price 9/- each (No P.T.)

Family Pack of 120 capsules 141/4d. doz. Retail Price 16/3d. each (No P.T.)



### "SKYLON" POLYTHENE HOT WATER BOTTLES

A P.A.T.A. LINE

## IST DUKES ROAD WESTERN AVENUE, LONDON, W.3

illustration above shows the range of colours in which the new "SKYLON" polythene hot water bottles are being made. Light in weight and complete with Polythene cap and rubber seal.



"SKYLON COMFORT"

Packed in polythene bags with attractive "Sales-Appeal" design showing, in silhouette, a Teenager in shortie and alternatively, Father in his nightshirt and cap, they are, with their bright colours a sure selling line for young and old. Ask your Wholesaler to show you the bottles in their printed wrapper and stock up now—you know our climate!



**NEW PURE SILVIKRIN** is not only more effective, it is more attractive and much easier to use! The new formula which is now an aqueous alcohol solution contains, in addition, Niacin and Sodium Lactate making New Pure Silvikrin even more beneficial for the maintenance of hair health.

**AN AQUEOUS ALCOHOL SOLUTION.** The adoption of an aqueous alcohol solution makes possible the penetration of the grease film on the surface of the skin, enabling Pure Silvikrin to act faster, more directly. **NIACIN.** New Pure Silvikrin contains Niacin, a substance that prolongs, and supports the effect of massage by increasing the blood-flow, thus carrying Pure Silvikrin's 18 vital amino acids right to the roots of the hair. **SODIUM LACTATE.** The introduction of Sodium Lactate into Pure Silvikrin means that cells around the hair receive special nourishment and grow at the correct rate.

This important product development represents a great advance in the general technique of hair-health. You can now recommend *Pure Silvikrin with Niacin* for the treatment of dandruff, falling hair, thinning hair, with even greater confidence.

A revolutionary new squeeze-bottle (with self-measuring cap) makes *Pure Silvikrin with Niacin* simple to apply and ensures the correct dosage for each application. A bottle contains a full month's treatment, retails at 11/6d.

Standard Wholesale Price 73/6d per dozen plus Purchase Tax.

Please note new address -

# Inherited Experience...

this is one of the influential factors responsible for the maintenance of the high degree of craftsmanship allied to modern scientific control in the manufacture of pharmaceutical preparations by the COX organisation.

Naturally, it is something of which we are proud, but it does not end there. We are developing that experience—constantly—thus ensuring that the products you buy from this House are characteristic of all that is most advanced and reliable in pharmacy.



ARTHUR H. COX & CO. LTD. BRIGHTON · ENGLAND

Manufacturing chemists for 120 years

# There's a present for everyone on the HALEX gift list!



20 exciting new lines nlus all the established sellers,

What a wonderful choice Halex has to offer! And a wonderful price range too—from 2/6d. to 40/-. There are toilet sets, mealtime sets and many other pretty gifts for children, including the lovable 'Noddy' and 'Sooty' lines. Smart, practical presents for men. And glamorous toilet accessories that will win every woman's heart. Many

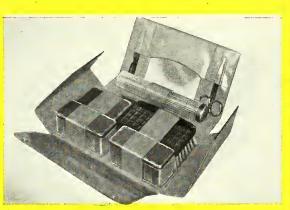
Halex lines come in special gift wrappings, and all are attractively designed to catch the eye and tempt the purses of Christmas shoppers.

Get in touch with your usual wholesaler, and stock up with Halex goods now. Display them this Christmas. They're sure to sell, and sell fast.



**E.625.** LADIES GIFT SET. P.V.C. case holding useful fittings in Pink, Blue or Green pearl colours.

Retail price 17/11



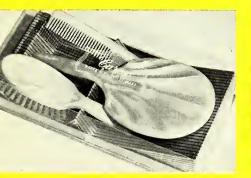
**D.447. GENT'S CONTINENTAL CASE.** A tan P.V.C. case containing hairbrush, comb, mirror, toothbrush tube, 3 containers, nailfile and scissors.

Retail price 25/-



E.364. 'SOOTY' TOILET SET. A five-piece toilet set containing 'Sooty' hairbrush, tooth-brush, nail brush, comb, and soap tablet.

Retail price 8/11



**E.114. CARESS 3-PIECE SET.** An attractively styled hairbrush, mirror and comb in a wide range of colours—pink, blue, green, white, black, lemon pearl or mauve pearl.

\*Retail price\*\* 19/6\*\*



D.181. FACETED MILITARY BRUSH. A rectangular military brush with an easy-grip back in amber, crystal or tortoiseshell.

Retail price 7/11



**F.617. BABY SET.** A rattle and bite for baby to play with while mother tidies him with hairbrush and comb. Pink or blue.

Retail price 7/5

# just right for the <a href="Christmas market">Christmas market!</a>

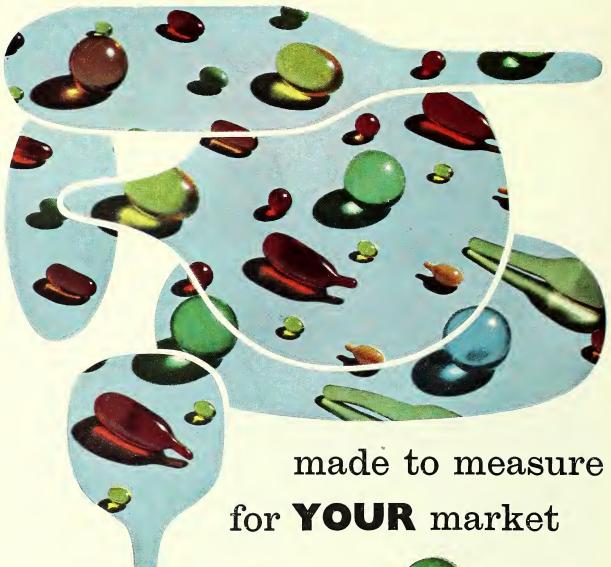
If you've not received a copy of the Halex Christmas Gift Catalogue, send the coupon below to Halex.

To: HALEX, HIGHAMS PARK, LONDON, E.4

Please send me a FREE copy of the Halex Christmas Gift Catalogue.

NA

ADDRESS



The vast potential of the multivitamins market is but one of the spheres in which capsules are proving their tremendous advantages. They are easy to handle, attractive to look at, simple to take; yet soluble . . . and they protect the contents. Capsules, in short, can add great sales appeal to your product, and at the same time iron out a lot of your production headaches. Add to all this the resources of the R.P. Scherer organisation . . . a complete service unit to handle every stage of encapsulating: production of pharmaceuticals to your own formula, material analysis and complete laboratory control, encapsulating and checking, packing and delivery. You maintain complete control of your formula, and have the exclusive use of the shapes and colours of your capsules. This service is at your disposal for experimental work too. So why not contact R.P. Scherer Now?



and a MUST for MULTI-VITAMINS

cherer Ltd

216-222 Bath Road, Slough, Bucks. 'phone: Slough 21241



**Products for Parenteral Nutrition** 

Amino Toll Million Solution So

Dialyzed Casein Hydrolysate FREE from high-molecular peptides and pyrogenic substances.

#### CALORIC CONTENTS PER LITRE

Aminosol-Glucose Vitrum
Aminosol-Glucose-Ethanol Vitrum

102 calories 307 calories 662 calories

#### **PACKINGS:**

1000 ml. and 500 ml. bottles\*

\*Aminosol-Glucose Vitrum also supplied in 100 ml. bottles for Paediatric use. Disposable Infusion sets available.

Literature and further details on request.

PAINES & BYRNE LTD., GREENFORD MIDDLESEX.

Minusal Chuchs P. F. H.

## 2 ALL-SEASON Money-Makers

## Diuromil on television

ALL THE YEAR ROUND



DIUROMIL, TV advertising is a hard selling, intensive, convincing series on relief and treatment of Rheumatism, Lumbago, Gout, Fibrositis and Sciatica. It is designed specially for product recognitions.

nition on your counter. Display DIUROMIL prominently, Customers now look for the blue DIUROMIL carton with the red seal. Stock up and sell.

BACK-UP THE TV. MESSAGE there's worth-while Profit on Every Sale

## Ralgex BIG PROFITS FROM A SMALL DISPLAY

In sales value per square inch of your counter the 4-in. x 3-in. red, yellow and black RALGEX outer 'pays and pays again for prominence without encroachment. Ralgex is a first-class pick-up repeater line—established in the forefront of pain-relieving remedies and the only solid embrocation for Backache, Neuralgia, Stiff Neck, Lumbago, Rheumatism and Strained Muscles.

DISPLAY NATIONALLY ADVERTISED 'RALGEX'—the only line

of its kind

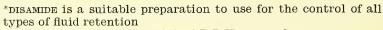


Display Material available from: Pharmax Ltd., Western House, Gravel Hill, Bexleyheath, Kent

# The New all-British oral diuretic 'DISAMIDE:

**TABLETS** 

5-CHLORO-2:4-DISULPHAMYLTOLUENE, 100 m.g. in each tablet



\*DISAMIDE is a product of original B.D.H. research

\*DISAMIDE is a highly potent, rapidly acting chlorothiazide-like agent having some carbonic anhydrase activity in vivo

\*DISAMIDE is well tolerated and patients continue to respond to its diuretic action over long periods of treatment



Bottle of 100 tablets Bottle of 500 tablets 4/6 subject to P.T. 13/- subject to P.T. 56/- subject to P.T.

THE BRITISH DRUG HOUSES LTD. LONDON N.1

## This is a Baby Corner

- . . . and this is why you really need one:
- \* All goods are within easy reach of the consumer.
- ★ Arrangement of foods and other goods in logical order makes selection easy, encourages buying.
- ★ Offers customers a full range builds sales *plus* goodwill.
- ★ Items can be displayed according to relative rates of sale, making for easy service and economical stock cover.



★ They're fast-moving

Heinz Baby Foods are bought every week—at least! They are one of the fastest-moving lines you carry, and they keep bringing mothers into your shop.

★ Sales are increasing

Sales of Heinz Baby Foods have doubled over the past 5 years.

- ★ Heinz can help . . .
  - ... by advising you on a Baby Corner layout and by servicing your stocks of Heinz Baby Foods.

HEINZ Baby Foods

## THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 172

September 26, 1959

No. 4154

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MORGAN BROTHERS (PUBLISHERS), LTD., at 28 Essex Street, Strand, London, W.C.2

Telephone: Central 6565

Telegrams: Chemicus, Estrand, London
WOI VERHAMPTON: 89 Woodland Avenue, Tettenhall Wood.
GLASGOW: 160 Nether Auldhouse Road, S.3. Phone: Langside 2679.
LEEDS, 16: 32 Wynford Rise, West Park. Phone: Leeds 67 8438.

#### ANNUAL SUBSCRIPTION

which includes The Chemist and Druggist Diary and Year Book, £2 10s. Single copies one shilling each.

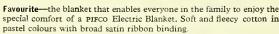


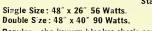
Favourite's really amazing value for money to the De Luxe, the ultimate in bedtime luxury. You will sell all the family PIFCO Electric Blankets—once one has one, all the others want one, too!

Every Pifco Electric Blanket is made and tested individually to the highest electrical standards. Pifco Electric Blankets carry the British Standards Kite Mark and are approved by The British Safety Council.

There are big-space Sunday paper ads for PIFCO Electric Blankets this winter. Order supolies now from your wholesaler.

### PIFCO **ELECTRIC** BLANKETS





Standard Model 3-Heat Model 65/6 85/-85/-111/6

Popular—the luxury blanket that's easy on the purse. Beautifully soft and warm rayon wool blend with deep pile. Four inch satin ribbon binding in matching colour. 3-Heat Model

Standard Model Single Size: 60" x 24" 63 Watts. 94/6 116/-Double Siz : 60" x 42" 120 Watts. 142/-169/9

De-Luxe—blissfully soft and fleecy 100% pure wool. Full length to ensure completely warmed bed from head to toe. Four inch satin ribbon binding in matching colour. Thermostatically controlled element for rapid heating. Double size has separate switches allowing either half to be used independently.

> Single Size: 62" x 28" 120 Watts. Double Size: 62" x 42" 186 Watts. 246/-

PIFCO Electric Heating Pads-made to BS 1789-provides local heat for many conditions of sickness and old age, are especially effective in soothing rheumatic pain.

Single Heat

3-Heat Medel

84/6

Volume 172

SEPTEMBER 26, 1959

No. 4154

## **Purchase Tax Changes**

#### MORE NEW MEDICINES EXEMPTED

THE Purchase Tax (No. 5) Order, 1959 (published as S.I. 1959, No. 1592) amends the list of drugs and medicines which are free from purchase tax and makes a number of additions and extensions to the existing list shown in the Purchase Tax (No. 2) Order (see C. & D., May 16, p. 520).

New items exempt from tax and extensions of existing items (which are shown in italics) are given below. The proprietary names, where known, are given in square brackets.

#### HEAD I

Injectable aqueous solutions of amino acids with vitamins and mineral salts, whether with or without sorbitol [Trophysan].

#### HEAD II

Cetyldimethylbenzylammonium chloride mixed with amethocaine hydrochloride [Throsil].

Chlorphenesin [Mycil preparations]. Dichlorphenamide [Daranide].

OO-Dimethyl O-2:4:5-trichlorophenyl phos-

phorothioate [Etrolene]. Dithiazanine iodide [Telmid]. Phanquone [Entobex].

Thiotepa.

HEAD III
Barbituric acid and thiobarbituric acid derivatives and salts thereof, whether or not mixed with one or more of the following substances, that is to say, amidopyrine, phenyldimethylisopropyl-pyrazolone, aluminium acetylsalicylate and phenacetin [Nembudeine].

Bretylium salts [Darenthin].

Cortisone and analogous steroid hormones and esters thereof, whether or not mixed with one or more of the following substances, that is to say, acetylsalicylic acid, aluminium hydroxide, dequalinium chloride, domiphen bromide, hexachlorophane and magnesium trisilicate.

3:5-Dinitro-o-toluamide [Zonmix].

Metaraminol, and salts thereof [Aramine]. Prothipendyl, and salts thereof.

Thalidomide, and salts thereof, whether or not mixed with acetylsalicylic acid and phenacetin.

o-Benzylphenyl 2-dimethylaminoethyl ether, its salis and derivatives.

The entry for N-Ethyl N'-(5-nitro-2-thiazolyl) urea (nithiazide) is transferred from head II to head III [Hepzide].

The Order applies to goods dispatched by registered traders to unregistered traders on or after September 21. Copies of the Order are obtainable from H.M. Stationery Office, York House, Kingsway, London, W.C.2 (price threepence).

#### I.P.S.F. Congress

PROBLEMS OF STUDENT EXCHANGE

STUDENT exchange was one of the major topics of discussion at the annual congress of the International Pharmaceutical Students' Federation held at Noordwijk-on-Sea, Holland, September 5-15. It was decided that propaganda for the scheme should be increased and that liaison secretaries should endeavour to contact retail, hospital, and manufacturing pharmacists who might be willing to act as hosts to foreign students. Israel was admitted to full membership of the Federation, and Ceylon, Vancouver University, East Japan, and an American women's pharmacy association were accepted as associate members. Officers elected wcre: President, Glen Moir, Canada; Vice-president, Rüdiger Below, Germany; Secretary-general, Anton Dauen, Holland; Treasurer, Reinhard Scholda, Austria. The next congress/study tour is being held in Stockholm, August 1960, and the 1961 congress in Ger-

#### Price Maintenance

MARKETING CHANGE BY A COMPANY

IN reducing some of its prices the Beecham Group, Ltd., have advised that they are making an important change in their marketing policy for those products. Retailers are now free from the condition of sale under which they may not sell the group's beverages to the public below certain fixed retail prices. The ruling applies to Lucozade, Ribena, PLJ and Sun Orange Quosh. and came into effect on September 19.

#### Call to Manufacturers

" ENFORCE RETAIL PRICES "

TO urge manufacturers, who advertise retail prices for their goods to take adequate steps to enforce them, is the aim of a motion to be considered at the Trade Conference of the National Chamber of Trade at Paignton on October 5. Other motions to be brought before the conference include: a request for legislation allowing the number of permitted Sundays of seasonal trading in seaside and holiday resorts to be increased from eighteen to twenty-six,



CIVIC RECEPTION: From left: Mrs. Harry Ridehalgh, Mr. Harry Ridehalgh (chairman of the local branch of the Pharmaceutical Society), Mrs. and Alderman L. V. Barney (mayor of Bournemouth) at the civic reception of the British Pharmaceutical Conference in Bournemouth (see p. 237).

and an appeal for the rescinding of the legal obligation to grant a weekly half-day holiday to shop employees. Criticism of wholesalers indulging in direct sales to the public to the detriment of retailers will also be discussed, and also the impracticability of the time limit of three days in which to notify British Railways of damage to goods in transit.

#### **Pesticides**

RECOMMENDED COMMON NAMES

A SUPPLEMENT to the British Standard 1831 contains the following Recommended Common Names, approved by the Pest Control Products Industry Standards Committee and endorsed by the chairman of the Chemical Divisional Council:—

RECOM-	
MENDED	
Соммон	OTHER NAMES
Name	
2,4-DES	2-(2:4-dichlorophenoxy)
,	ethyl hydrogen sulphate
	SES
	sesin
2,4-DES-	sodium 2-(2:4-dichloro-
sodium	phenoxy)ethyl sulphate
chlorpropham	isopropyl N-3-chlorophenyl-
	carbamate
	CIPC
diuron	<i>N</i> -3:4-dichlorphenyl- <i>N'N'</i> -
C	dimethylurea
fenuron	NN-dimethyl-N'-phenylurea
griseofulvin*	7-chloro-4:6-dimethoxy-
	coumaran-3-one-2-spiro-
	1'-(2'-methoxy-6'-methyl- cyclohex-2'-en-4'-one)
	7-chloro-4:6:2'-trimethoxy-
	6'-methylgris-2'-en-3:4'-
	dione
mecoprop	$(\pm)$ - $\alpha$ -(4-chloro-2-methyl-
месоргор	phenoxy)propionic acid
	CMPP.
	MCPP.
oxytetra-	4-dimethylamino-1:4:4a:
cycline*	5:5a:6:11:12a-octahy-
	dro-3:5:6:10:12:12a-
	hexahydroxy-6-methyl-
	1:11-dioxonaphthacene-2-
1 1 .	carboxamide
phenkapton	S-2:5-dichlorphenylthio-
	methyl diethyl phosphor- othiolothionate
	S-(2:5-dichlorophenylthio-
	methyl)
	OO-diethyl dithiophos-
	phate
quintozene	pentachloronitrobenzene
4	PCNB
simazine	2-chloro-4:6-bisethylamino-
	1:3:5-triazine
thiometon	S-2-ethylthioethyl dimethyl
	phosphorothiolothionate
	S-2-ethylthioethyl
	OO-dimethyl dithio-
	phosphate

\* This name is an approved name of the British Pharmacopæia Commission.

#### **Under-employment**

NEW PLANS FOR EASING PROBLEM

SPEAKING at a luncheon given by the Glasgow chamber of commerce on the occasion of his visit to the Scottish Industries Exhibition on September 17, the President of the Board of Trade (Sir David Eccles) outlined plans for improving the Government's powers to

get industry to move to areas of underemployment. He said that good though the results were of the present measures, the Government was not entirely satisfied with them. "The next Government, whoever they may be, will need new and flexible powers to deal with local unemployment that can arise either from swift changes in techniques and markets or from the commercial handicaps inevitable in certain areas of the United Kingdom." Among the major changes he believed should be made were firstly that grants should be available to those who preferred to build their own factories, and that such grants should be related to the difference between the construction cost and the value on the open market of those factories when built. Secondly, the conditions for receiving loans towards plant and equipment when a firm showed it could not raise the money from commercial sources had proved a serious handicap and should be discarded. "It would also be wise to ask for power to add to the list of places which qualify for help, places where there is a clear and imminent threat of high unemploy-

#### Radioactivity on Farms

AN INTERNATIONAL SEMINAR

THE Food and Agriculture Organisation of the United Nations has sponsored a seminar, that was held in Cambridge, September 16–22, on the training of agricultural advisory services in the agricultural aspects of environmental radioactive contamination. The seminar was open to senior officers of agricultural and veterinary advisory services nominated by member Governments. The seminar considered the implications for agriculture of the increasing use of atomic energy as a source of power, including the safe disposal of radioactive waste products from nuclear power stations and the problems that could be caused by accidental release of radioactive material to the atmosphere, or to water. Seventeen European countries were represented.

#### **Britain and Turkey**

SOCIAL SECURITY PACT

A CONVENTION on Social Security has been signed between the United Kingdom and Turkey and will come into operation at a later date when it has been ratified. The Convention covers sickness, maternity, death, retirement, widows and industrial injuries benefits provided by the schemes of National Insurance in this country and the corresponding benefits in Turkey. The Convention provides equality of treatment for British and Turkish Nationals. It also provides that people insured in both countries will be able to add together insurance contributions paid in the two countries in order to determine the right to receive benefits.

#### **Protein Production**

EXTRACTION FROM PLANTS

A NEW process to extract protein from plants has been announced by British Glues and Chemicals, Ltd., 15 Kings-

way, London, W.C.2. Grass, maize, peanuts and cottonseed have been successfully used as sources. The material is suspended in water and a series of "impulses" transmitted by the water break cellular barriers to release the cell contents. The final separation of protein is understood to yield a tasteless, odourless powder for nutritional use in protein-deficient overseas areas. The manufacturing plant is, at present, in a pilot stage, but development to large-scale units is underway.

#### **Retail Sales**

BOARD OF TRADE FIGURES

RECENTLY issued Board of Trade figures show that sales of chemists' goods by independent retailers were 2.8 per cent. higher in June than in May and 4.7 per cent, higher than in June 1958. Multiple retailers' sales were 1.9 per cent, lower in June than in May but 7.3 per cent, higher than in June 1958. Sales by co-operative societies were 2.8 per cent, lower than in May but 7 per cent, higher than in June 1958. The figures do not call for receipts under the National Health Service.

#### Air Freight Packaging

NEW BRITISH STANDARD

THE British Standards Institution, 2 Park Street, London, W.1, have published a new standard "Packaging for Air Freight" (B.S. 1133: Section 20: 1959, price 4s. 6d.). It is intended to give in general terms some guidance on the special conditions applying to the packaging of merchandise (excluding livestock) for conveyance by air. In addition to dealing with types of material used in packaging for air freight the new standard lists restricted articles, and has a section dealing with variations of pressure and temperature.

#### University Research

CURRENT U.K. WORK

FROM material collected by university staffs, "Scientific Research in British Universities, 1958-59" (H.M. Stationery Office, price 25s.), provides information upon the placing of current research in the seventy-one colleges and universities listed. The names of staffs concerned with specific work are given. Subjects of direct or indirect interest to pharmacy are numerous though distributed throughout many departments and establishments.

#### IRISH NEWS

THE NORTH

#### Associates' Section

SEPTEMBER COMMITTEE MEETING

A MEETING of the committee of the Associates' Section of Ulster Chemists' Association was held in Belfast on September 7, Mr. W. T. Hunter (chairman) presiding. Reports of the social subcommittee meetings held on June 15 and August 20 were received, and it was noted that the committee had decided that no October dance should be held this year. Preliminary arrange-

ments were made for the annual meeting in respect of which the draft annual report and balance sheet were approved. It was agreed to ask the Pharmaceutical Society of Northern Ireland for the use of their main hall on November 5 for the meeting. The following were approved for associateship:—Pharmaceutical Chemist, Mr. R. L. McIlvenna; Apprentices, Miss A. E. Thompson and Mr. D. L. Ogle. The chairman then called upon Mr. S. Wright to present a gift to Mr. J. M. McC. Thompson to mark the occasion of his recent marriage, Mr. Thompson suitably replied.

#### IRISH BREVITIES

#### THE REPUBLIC

THE use of chemicals in the production of grass was the theme of a four-day symposium held in Dublin recently. Organised by the Society of Chemical Industry, it was attended by 140 delegates from Ireland, England and France.

PHARMACISTS wishing to enrol for the intensive study course to be held in connection with the Irish Pharmacy Week and which commences on October 13 should write to the Secretary, post-graduate Study Group, College of Pharmacy, Shrewsbury Road, Dublin. The fee for the course is £1.

THE annual retreat of the pharmacy branch of the St. Joseph's Young Priests' Society is being held at the Retreat House of the Jesuit Fathers, Milltown Park, Dublin, October 10-11. Those wishing to participate should apply to Mr. F. P. McDonnell, 12 Summerville Park, Upper Rathmines, Dublin.

#### NORTHERN IRELAND

At the monthly committee meeting of the Irish Drug Association held recently, all outgoing officers were re-elected as follows:—President, Mr. P. A. McAuliffe; Vice-president, Mr. A. C. Hennessy; and Treasurer, Mr. D. J. Murphy.

#### NEWS IN BRIEF

THE *Public Pharmacist* (quarterly official journal of the Guild of Public Pharmacists) is to be published six times a year from February 1960.

NYSTATIN preparations and oxygen equipment (payment for the loan of oxygen therapy equipment and replacement of disposable plastic masks) have been added to the list of specially expensive drugs and appliances for which payment may be made to dispensing doctors in Scotland as from September 1.

#### SPORT

Golf.—London Chemists' Golfing Society, at Finchley golf club on September 16. Last meeting of the season. Golf was followed by a dinner given by the president (Mr. R. L. Taylor). President's prize, E. S. Hole (12) 38; Harker Stagg prize, M. N. Doyle (3), 36; British and Colonial Cup, G. Roberts (20), 36; other leading scorer: G. Penman (9), 35. A special prize was given by Mr. L. J. Morson for a Calcutta Bogey Competition, which was won by D. C. Horton who was 5 up on bogey, handicap 18.

#### TOPICAL REFLECTIONS

#### By Xrayser

#### Bournemouth

I have speculated in other years on the effect of the Conference venue on those taking part in the proceedings-whether, in fact, the members attending Oxford acquired the academic mien, or those at Aberdeen the solid, hard-headedness attributed to the natives of that far-northern city. Outstanding local characteristics have never appeared to me to be a part of the Bournemouth scene. They may be present, but they tend to be submerged in the great influx of visitors to the town. It will be for the native this time to try to identify the visitor. Apart from appearances, a moment's thought will convince him that, whatever this rare genus may be, it has not come to the "mecca" of conferences at this particular time to identify itself with any one of the political parties, which have other scissors to grind at the moment. But the Conference timetable suggests that identification of the stranger is not being made too easy for the local populace, for the pharmacist, in one short week, plays many parts, and it is extremely unlikely that, sartorially, he will present the same appearance at the Pavilion on Tuesday night that he displays on Thursday afternoon at Mayrick Park. And eyebrows might be raised if one of the scientists, in a fit of mental aberration, and wilting under the strain of an arduous week, made his appearance at the Conference ball suitably attired for the Jephcott tennis tournament.

#### Twenty-three years ago

It does not seem anything like twenty-three years since the Conference visited Bournemouth, so much has happened in the intervening time. I have been refreshing my memory on the highlights of that occasion, and in many ways it is a different world. To begin with, it was a midsummer meeting, opening on June 22, and many may feel that that is a better time of year than the present very late one. In the more spacious days before the war, it was the custom to mix scientists and branch representatives—a still more baffling circumstance for the local populace and I discover that the representatives were engaged in discussion on such questions as the method of election to the Council of the Pharmaceutical Society, with a decision against territorial representation. Bath moved that apprenticeship be taken after all college training, and was in favour of one year for what was very suitably called the Preliminary Scientific examination, and two years for the Qualifying examination. In view of later developments, the Bath representatives may have felt that they were a little in advance of their time. Concern was expressed by Burnley over the admittance of holders of university degrees to the register, and the view was expressed that there would be different standards at different universities. The secretary (Mr. H. Linstead) said that any university could set up a degree in pharmacy, therefore it was essential for the Pharmaceutical Society to retain such control as it could. It is evidence of the position of pharmacy in 1936 that Leeds should have put forward that "an advertisement in the official organ of the Society shall be deemed to be at a salary not less than £200 per annum "—that is, where no figure was stated. Tees-side wanted the Society to institute a bureau to inform the public of the pharmacist's qualifications and thus to enhance the status of the pharmacist. Those few extracts illustrate the need for a live and continuous interest on the part of members, and demonstrate that sometimes the views of the rank and file are considerably in advance of those of their representatives at Bloomsbury Square.

#### Warts

At the same time as branch representatives and scientists were engaged in debate at Bournemouth in 1936, correspondence in The Chemist and Druggist made it clear that many readers had come across examples of curing warts by magic and charm, and the more fantastic-seeming the methods used, the more success seems to have been achieved. Such things as washing the hands by moonlight in a dry silver basin would not commend itself to local water authorities at the present.

#### TRADE NOTES

Discontinued Items.—Viozol tablets have been discontinued by CIBA Laboratories, Ltd., Horsham, Sussex, and no further stocks are available.

Better Profit Margin.—Elsewhere in this issue the makers of Virol (Bovril, Ltd.), Old Street, London, E.C.1, announce new prices and terms, effective from October 5, which have the effect of increasing the trade margin of profit.

Change of Container.—From October 1, Kalzana calcium and vitamin-D tablets are being issued by the manufacturers in a new aluminium container of seventy-five. Distributors from that date are Fassett & Johnson, Ltd., 86 Clerkenwell Road, London, E.C.1, and 139 Bath Street, Glasgow, C.2.

Sole Agents. — Cadoricin S.A., 18 Rue de la Paix, Paris, France, have appointed E. M. Douek & Co., Ltd., 39 George Street, London, W.1, to be the sole agents, importers and distributors for Fli-Flap egg shampoo, Dulsol oil shampoo and Lustrale brilliantine.

A New Plant at Liverpool.—Petrolite, Ltd., a wholly owned subsidiary of Petrolite Corporation, St. Louis, Missouri, U.S.A., are to manufacture at Liverpool the major products of the parent company, including Tretolite demulsifiers and desalting chemicals.

Caps for Rigid Cans.—The transferable "dispenser" unit recently introduced by Universal Metal Products, Ltd., Salford, Lancs (C. & D., August 29, p. 120), is intended for use with ordinary rigid cans, the unit screwing on to the nozzle in the same way as a screw cap (not for use with aerosol cans as previously stated).

Autumn Showroom Fixtures' Changes.—The following changes are announced in the arrangements for autumn showrooms organised by Ayrton, Saunders & Co., Ltd., 34 Hanover Street, Liverpool, 1:—Dundee, October 12–16 (not October 5–8); Manchester, additional showroom, Midland Hotel, October 12–16.

Complete Formulation Service Offered. — Therapharm, Ltd., 28 Wood End Road, Harrow, Middlesex, offer a



THE NEW PACK: Redesigned container and carton in which the reformulated Silvikrin (see C. & D., September 12, p. 178) is being issued by County Laboratories, Ltd., Honeypot Lane, Stanmore, Middlesex.

complete service in the formulation, production, presentation, packaging and supply of pharmaceutical preparations. While especially concerned with the needs of overseas buyers who require products to their individual specification, they state that they are equally in a strong position to help pharmaceutical companies and wholesalers at home who are not equipped with those facilities.

Removal of Purchase Tax.—MERCK SHARP & DOHME, LTD., Hoddesdon, Herts, announce that their products Daranide (dichlorphenamide) and Aramine (metaraminol bitartrate) are now exempt from purchase tax. Also exempted are CIBA LABORATORIES, LTD., Entobex tablets; ALLIED LABORATORIES, LTD., Throsil lozenges; THE BRITISH DRUG HOUSES, LTD., Mycil ointment and spray; BURROUGHS WELLCOME & Co., Darenthin. [In addition to the 100-pack of Darenthin mentioned as being available (C. & D., September 5, p. 139), a 500-pack is also listed.]

Showcard for Toilet Rolls. — An "eye-catching" showcard in support of new coloured Bronco toilet rolls is now available to retailers from Bronco, Ltd., Berkshire Road, Hackney Wick, London, E.9. It features four rolls and interleaved packets in the three new



colours, pink, green and blue. Distinctive lettering in black and dark red is set against a vivid yellow ground. Also available is a white metal counter dispenser, holding rolls and interleaved packets in each of the new colours.

Tooth-paste Display Staud. — A display stand for Noddy tooth-paste issued by the makers, Cullingford of Chelsea (Castle Soaps of Cambridge, Ltd.), is being handed out by the company's salesmen with a free tube fitted into it ready for standing up for display on the counter. The order may be booked for direct delivery or through the wholesaler. Orders for wholesalers should be directed to Cullingford of Chelsea, Webber Road, Kirkby, Liverpool.

Bath "Luxuries." — Two new bath "luxuries" by Yardley & Co., Ltd., 33 Old Bond Street, London, W.1, are a perfumed after-bath freshener and triple perfumed bath salts. The lotion "can be splashed on more lavishly than a cologne or lavender, as the strength has been carefully balanced to give a light, subtle fragrance." Packed in frosted bottles, which are cartoned, the lotion comes perfumed

with lavender, Red Roses or Bond Street perfumes. The bath salts are supplied in boxes of six foil-wrapped, scored tablets perfumed with lavender, Red Roses, Freesia, April Violets, or assorted.

Christmas Promotion Campaign. To create maximum sales, Gillette Industries, Ltd., are this year promoting the most powerful ever Christmas campaign. For five weeks, commencing on November 23, their "five star" products are being promoted with an expenditure of £17,000 per week. The range comprises: (i) the "60-Special" razor set; (ii) blue Gillette ten-blade disconsers. dispensers mounted on individual Christmas cards; (iii) the completely new presentation set-a gold-plated, one-piece razor in a blue velvet lined, ivory rexine case, complete with tenblade dispenser; and (iv) the Gillette travel set, a one-piece razor complete with six-blade dispenser in a handy pigskin-style travel case. The fifth item is a series of three "Good Companion gift sets in which Gillette have cooperated with Cussons, Ltd. Each of the sets includes a "60-Special" razor with Cussons' shaving preparations.

Vitamin D<sub>3</sub> Trials in Sheep. — Following large-scale field trials recently undertaken by two Northumberland farmers it is claimed that sheep, par-ticularly hill sheep, can be made healthier, produce better lambs which grow faster and yield more valuable wool by injecting them with vitamin Farmers' Trading Society and the Crookes Laboratories, Ltd., Park Royal, London. Not only were the lambs in the experiments as much as lambs in the experiments as much as 7 lb. heavier after the injections which means that they will be more highly priced in the fat lamb sales, but the fleeces clipped from the treated ewes were worth an average of 5s. each more to the farmers. Mr. J. Walne, M.P.S., of Hexham, who was in charge of the trials, said, on September 11, "The results are quite incredible. Lambs reared on ewes which had been injected grew ahead at a noticeably faster rate and at approximately eight weeks old those from ewes having one injection were 4 lb. 6 oz. heavier and those from ewes which had two injections were 6 lb. 3 oz. heavier.

#### **Bonus Offers**

ASPRO - NICHOLAS, LTD., ethical pharmaceutical division, Slough, Bucks. One doz. tubes Arthipax cream charged as eleven. Up to October 30.

DISTILLERS CO. (BIOCHEMICALS), LTD., Broadway House, London, S.W.19. Zynocin, twelve tubes for the price of ten. From October 1 to November 30.

CULLINGFORD OF CHELSEA (Castle Soaps of Cambridge, Ltd.), Monroe House, Denbigh Street, London, S.W.1. Noddy tooth-paste. Thirteen charged as twelve.

IRISH MOSS MANUFACTURING CO., LTD., 421 Antrim Road, Belfast. Loughrey's syrup and pastilles. Thirteen to doz. on one- or two-doz. lots; four-teen to doz. on three-doz, and over.

#### Calls for Tenders

THE Board of Trade has issued details concerning tenders sought by various overseas bodies, and an outline is given below of the requirements and closing dates. For fuller information readers should apply quoting reference, to Export Services Branch, Lacon House, Theobalds Road, London, W.C.1.

Pharmaceutical products, 231 various lots. Junta Nacional de Asistencia y Prevision Social, Somite de Licitaciones, Almacen de la Junta Nacional de Asistencia y Prevision Social, 24 Avenida S.O. y Calle 27 de Mayo 707, Managua, Nicaragua. (E.S.B. 22325/59, September 30.)

Barrier cream, surgical sundries and sanitary towels. The Secretary, Tender Board, South-west Africa Administration, P.O. Box 27, Windhoek, South-west Africa. (E.S.B. 21922-21950 and 21979/59, October 2.)

Isonicotinic acid hydrazide, 40 million tablets, 50 mgm. The Chairman, Tender Board, Ministry of Health, P.O. Box 500, Colombo, Ceylon. (E.S.B. 21509/59, November 24.)

#### **NEW PRODUCTS**

Penicillin V Granules. — Pharmaceutical Specialities (May & Baker), Ltd., Dagenham, Essex, announce the introduction of a new presentation of Penvikal brand potassium penicillin V granules for extemporaneous preparation of solution.

Lignocaine Injections. — Boots Pure Drug Co., Ltd., Nottingham, have added Lignostab brand injections of lignocaine hydrochloride 2 per cent. in boxes of six to their list. Ampoules can also be supplied with adrenaline 1 in 80,000 or nor-adrenaline 1 in 80,000.

Economy Size Issued.—An economy size of Medic-aire aerosol is now being issued by Cooper, MacDougall & Robertson, Ltd., Berkhamsted, Herts, which contains 16-oz. in addition to the existing popular 5-oz. size. The economy size containers are packed in units of six. A display unit is available from the company's representative when he calls.

**Tablets for Bronchospasm.**—Following a successful test market operation Aspro-Nicholas, Ltd., Slough, Bucks, are launching their new product

Bronchipax as an open selling line for bronchospasm. The product is being retailed through chemists only. Packed in cartons of twenty-four and seventy-two tablets, the company state that the therapeutic effect is sustained for up to twelve hours from a single dose.

Ointment for Skin Infections.—Ecomytrin ointment, produced by William R. Warner & Co., Ltd., Eastleigh, Hants, and containing amphomycin, 0'5 per cent.; neomycin B base, 0'33 per cent., in a water-miscible base is available in cartoned tubes of 15 gm. The ointment is being recommended to the medical profession for the treatment of bacterial skin infections, Ecomytrin is subject to the provisions of the T.S.A. and supplied to the public only on prescription.

Oral Diuretic Tablets. — A potent oral diuretic available as tablets each containing 100-mgm. of 5-chloro-2:4-disulphamyltoluene, a substance first synthesised in the research laboratories of The British Drug Houses, Ltd., Graham Street, City Road, London, N.1, is now being marketed under the name of Disamide. It is claimed to be well tolerated and patients continue to respond to its diuretic action over long periods of treatment. Scored tablets are packed in bottles of twenty-five, 100, and 500.

## MANUFACTURERS' ACTIVITIES

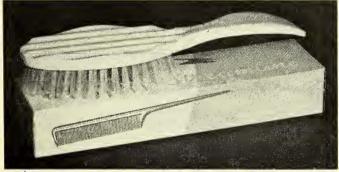
Intensive Development.—Jeyes' Sanitary Compounds Co., Ltd., River Road, Barking, Essex, have a new warehouse which the company states has wider implications than the extension of stores and sales facilities. Councillor Mrs. M. Bredo, mayor of Barking, opened the warehouse on September 18 which initiates "a period of vigorous and intensive development," states the company.

Sponsored Steeplechase. — Mr. L. Cussons (a director of Cussons Sons & Co., Ltd.), is sponsoring a three-mile race to be called the "Imperial Leather steeplechase" to be run at Manchester racecourse on December 5. Mr. Cussons has given £3,000 as prize money and a gold and silver cigar box valued at £250. An invitation to attend the meeting is being issued to the 1,200 employees of the company and their families, who will be entertained to a meal at the racecourse.

British Glass Machine for America.—A British-designed machine for the mass production of interchangeable laboratory glassware has been sold by Quickfit & Quartz, Ltd., Stone, Staffs, to Corning Glass Works of America, who distribute certain of the company's products in the United States. The machine, worth \$7,500, was manufactured and delivered in five months, and is to be used in the Big Flats, New York State, plant of the Corning concern.

New Factory For Devon. — The Hobart Manufacturing Co., Ltd., are opening a new factory in Barnstaple, Devon. The official ceremony is being performed by the mayor of Barnstaple, Alderman Walter J. Thomas, J.P., and the mayoress on October 14. In spite of major extensions to their New Southgate branch carried out a few years ago where all available land was used, the growing demand for their products has made this further major extension necessary.

Cricket Cups Awarded. - Six Brylcreem cricket cups were presented to the year's outstanding cricketers at a reception in London on September 16. The winners were Jim Parks, Sussex, who won two cups (for the fastest century of the season and for wicket-keeping); John D. Bannister, Warwickshire (for best bowling performance—most wickets taken in a single innings); Peter Walker, Glamorgan (for fielding -highest number of catches); Mike J. Smith, Warwickshire (special award for an outstanding performance in scoring over 3,000 runs during the season—first player to do so for ten years) and Abbas Ali Baig, India and Oxford (visitor's award, for scoring a century in his first Test). In addition a special presentation was made to Godfrey Evans, Kent, "in recognition of his great wicket-keeping since the war."
Mr. Robert Murphy (managing director, County Laboratories, Ltd.), introduced Mr. Leslie Ames who presented the awards; and Mr. Denis Compton introduced the recipients. Godfrey Evans, as spokesman for the recipients, thanked Mr. Murphy and County Laboratories, Ltd. for the awards which "create a tremendous amount of interest." He pointed out that outstanding performances by a cricketer were recognised each month by the company by the presentation of a set of gold cuff-links.





NEW PRODUCTS FOR THE TOILET DEPARTMENT: "Streamline" nylon hairbrush and tail-comb set by Spa Brushes, Ltd., Chesham, Bucks. The set is available in pink, blue, green and natural plastic in presentation box. Right: Spa bath set No. 3 in new window pack. Available in yellow, black, green, red, blue and pink, the set comprises Spa bath brush No. 1 with detachable head and 608 nail brush, both filled with nylon bristles.

#### **BRANCH EVENTS**

HARROW

#### Visit to Wellcome Museum

FOR their first meeting of the 1959-60 session the Harrow Branch of the Pharmaceutical Society visited Wellcome Building, Euston Road, London, on September 16. After refreshments Mr. R. L. Champion welcomed the visitors on behalf of the Wellcome Foundation, Ltd., and Mr. H. Treves Brown (branch chairman) replied. Although the primary object was to view the reconstructions of early pharmacies (see C. & D., July 25, p. 27), the thirty or so members and friends attending first saw the Wellcome Historical Medical Museum, where Dr. M. E. Rowbottom gave a brief description of some of the main exhibits. It was explained that space was available only for a small fraction of the Museum's possessions and that the displays had therefore to be changed at intervals. Among the many attractions in the reconstructed pharmacies were the colourful drug jars, particularly those in the seventeenth century Italian phar-macy, and the apparently unlabelled jars in the Arab pharmacy. The visitors were also shown the Wellcome Museum of Medical Science, a haunt of the post-graduate medical student.

#### OVERSEAS NEWS

DENMARK

#### Coinage Change

UNDER a new Bill, Denmark's coinage is to be brought into line with the system of other European countries, lower denominations being copper-coloured and higher denominations of white metal.

#### ARGENTINA

#### Chemists on Strike

In protest against state intervention in pharmacy, including the establishment of Government pharmacies without a pharmacist in full-time attendance, chemists in Argentina closed for twenty-four hours recently. Medical students at Buenos Aires University "came out" in sympathy with the chemists.

**IRAQ** 

#### Soviet Medical Aid

Soviet medical workers have started to vaccinate the Iraqi population against smallpox. In accordance with the U.S.S.R.-Iraqi agreement, a plan has been drawn up to vaccinate within a short time, the entire population of Iraq. On August 19, a Soviet gift of 15 million smallpox vaccine doses, 3,300 gall. of refined alcohol, 2 tons of medical cotton wool, laboratory equipment, reagents and other materials was handed over to the Iraqi Government in Baghdad.

## SOUTH AFRICA Supplies Within Minutes

JOHANNESBURG'S 300 retail chemists and druggists are benefiting from a "war" between the South African Druggists, Ltd., and its rival, Alex Lip-

worth, Ltd. Six months ago the latter company created a sensation among city and suburban chemists by organising at least twenty-two deliveries a day! It put into operation a squadron of forty motor scooters which, based on the company's central warehouse, rushed out immediately with any telephoned order. It was the boast of the management that the drugs and medicines were delivered within twenty minutes. Then, during July, South African Druggists, Ltd., went into action, putting on the road the first of a number of huge "warehouse" vans. Stocked with all the drugs likely to be asked for, and manned by a pharmacist, the van is equipped with refrigeration, a motor scooter and rider, and short-wave radio transmitter and re-ceiver. Orders for drugs from any chemist in the northern suburbs of Johannesburg are passed by radio telephone to the van as it cruises in that quarter of the city. At once the delivery man roars out on his motor-scooter and, in a matter of minutes, delivers the drug. It appears to be the object of the company to introduce other such vans, so as to ensure a complete coverage of Johannesburg.

#### Tranquilliser Sales Restricted

THE South African Government, acting on recommendations from the South African Medical and Dental Council and the South African Pharmacy Board, has decided to ban the free sale of certain types of tranquillisers, hypnotics and hormone skin creams. That move, which closes up one of the remaining loopholes in the Sixth Schedule of the Act, has been welcomed by both pharmacists and medical practitioners. Now, they say, South Africa has taken a step that brings it into line with the

overseas countries restrictions of sales of potentially harmful drugs. The drugs will be obtainable only on a doctor's prescription. At the same time Capetown chemists state that they are in a quandary because of the word "derivatives," which is used several times in the new proclamation about potentially-harmful drugs which appeared in the Government Gazette. The list of drugs seems, at first glance, identical with the previously published lists; but the words "their preparations and admixtures" have now been extended to "and derivatives," which may include many cosmetic preparations, sedative tablets and tranquillisers, as well as other preparations. Pharmacists are now waiting for notice from manufacturers of proprietary brands to tell them whether their products are in the prohibited list. The chairman of the Cape Western Province branch of the Pharmaceutical Society of South Africa said that a certain cosmetic oil for rejuvenating the skin may, for instance, be a derivative of estrogens which appear in the proclamation, but that pharmacists are not sure.

#### LEGAL REPORTS

#### **Pethidine Addict Sentenced**

More than eighty times in the past few months, Ernest John Barnes, otherwise Gerald Lynch, a thirty-two-year-old Irishman of no settled address, has called at hospitals, described imaginary symptoms and received pethidine. Cheshire Quarter Sessions Appeals Committee on September 15 sentenced him to two years' imprisonment. He had been sent for sentence by Wallasey magistrates, after being found guilty of obtaining food and drugs by false pretences from Victoria Central Hospital, Liverpool.

#### MANCHESTER ANALYST'S REPORT

#### Iodine solution not to standard

IN his annual report for 1958, the Manchester public analyst (Mr. A. N. Leather) refers to a 2-oz. sample of solution of iodine submitted for analy-The label described the contents sis. The label described the contents as "solution of iodine" and the fluid contents resembled in appearance weak solution of iodine, B.P. On analysis the contents were found to be: Total iodine, 2.3 per cent., free iodine, 1.7 per cent.; alcohol 88 per cent. Potassium, sodium and ammonium com-pounds were absent. The sample thus had the composition of an alcoholic solution of iodine. "It is known that after some time part of the iodine in such a solution ceases to be free iodine. The sample differed from the common commodity 'tincture of iodine' in that the sample contained no potassium iodide," says the report. "Clearly the sample had a composition unlike that required for any solution of iodine mentioned in the British Pharmacopæia, the British Pharmaceutical Codex or the Extra Pharmacopæia." The product was on sale to the public, and the specimen had been purchased over the counter. The sample was reported as unsatisfactory because of the lack of precision in the labelling, even though

the sample was in fact a solution and did contain iodine. The recommenda-tion was made that the packers should be requested to employ the formula for weak solution of iodine, B.P. Subsequent inquiry by a sampling officer showed that 2-oz, bottles were filled from larger bottles labelled "Solution of Iodine as recommended by the Home Office." "That information gave a lead, and H.M. Stationery Office was then able to supply The First Aid in Factories Order, 1938, and the first-aid leaflet (form 923) both of which refer briefly to 'a 2 per cent, alcoholic solution of iodine.' The actual sample complied only roughly with that require-ment." The packers agreed to alter the label on the bottles and later submitted a satisfactory specimen-label with the following wording: "Not to be taken. Solution of iodine, 2 per cent, in rectified spirit (90 per cent. by volume). As recommended by the Factory Department of the Home Office for the treat-ment of minor injuries." They also stated that the pack was intended for use in factory first-aid outfits, that it had not been intended for sale to the public, and that in future it would not be offered for sale to the public.

#### **COMPANY NEWS**

SANDOZ, LTD., Basle, Switzerland.—The company recently increased its share capital from 50 million to 60 million Swiss francs by the issue of 20,000 new shares.

UNILEVER, LTD. — Lord Heyworth, chairman for eighteen years, is retiring in April 1960. He reaches the official retiring age in October but continues as chairman until the company's next annual meeting.

S. MAW SON & SONS, LTD.—The directors announce that, as a result of agreements now completed, the company has become a member of the Norcros group. Messrs. Maw will continue to be managed by its existing management including the present chairman and executive directors and will continue its long established trading policies. For 152 years Maw's has been a privately owned family business and this step has been taken in order to provide for death duty liabilities and in order to provide access to the capital markets for the future development of the company.

New Companies
P.C. = Private Company; R.O. = Registered Office

M. FRIEZE (CHEMISTS), LTD. (P.C.).—Capital £500. To carry on the business of wholesale and retail chemists, etc. Directors: Maurice Frieze, M.P.S., and Pearl Frieze. R.O.: 60 Brunswick Street, Manchester, 13.

Brunswick Street, Manchester, 13.

RAYNE FOSTER, LTD. (P.C.).—
Capital £500. To carry on the business of wholesale and retail chemists and druggists, etc. Directors: Harold Rayne, M.P.S., and Emily M. Little. R.O.: 184
Bath Row, Birmingham, 15.

G. GRANT WILSON, LTD. (P.C.).
—Capital £100. To acquire the business of chemists and opticians carried on by Gordon G. Wilson, 12 Prentice Place, Potter Street, Harlow, Essex. Directors: Gordon G. Wilson, M.P.S., Iris C. Wilson and Olive P. Wilson.

CHATTEM CHEMICALS, LTD. (P.C.).—Capital £1.000. To carry on the business of manufacturers, importers, exporters and distributors of and dealers in chemicals, pharmaceutical preparations, drugs, etc. Subscribers: John D. Eccles and Jean D. Wright. The first directors are to be appointed by the subscribers. Solicitors: Millett & Co., 85 London Wall, London, E.C.2.

#### **BUSINESS CHANGES**

ASHFORD CO-OPERATIVE CHEMISTS, LTD., have opened a new pharmacy branch at 29 Court Wurtin, Beaver Lane, Ashford, Kent.

WALLIS LABORATORY, LTD., have removed to Greenhill Crescent. Holywell Estate, Watford (telephone: Watford 21812).

DUNFERMLINE CO-OPERATIVE SOCIETY, LTD., have bought the Brucefield Pharmacy (formerly owned by Mr. R. Lyall), St. Andrews Street, Dunfermline.

C. L. BENCARD, LTD., are merging with an associate on September 28 and are to trade as Beecham Research Laboratories, Ltd., Great West Road, Brentford, Middlesex.

#### Appointments

CHEMIA PRODUCTS (U.K.), LTD., Imperial House, Dominion Street, London, E.C.2, have appointed Mr. W. V. Dawson their manager.

GENATOSAN, LTD., Loughborough, Leics, have made the following appointments to their medical representative staff:—Mr. C. G. Newman (Middlesex), Mr. R. J. Sloss (Northern Ireland) and Mr. C. S. Luke (Southeast London).

WILLIAM R. WARNER & CO., LTD., Eastleigh, Hants, announce that Mr. Gordon W. Nosetti has joined their group of companies to head their export division and to be responsible for their overseas operations in the pharmaceutical and cosmetic fields.

#### MARRIAGES

DOWNWARD — BLOUNT. — At Holy Trinity Church, Wilnecote, Warwicks. recently, Michael Downward, M.P.S., Wellesley Street, Hanley, Stoke-on-Trent, Staffs, to Gillean Primrose Blount, M.P.S.. Hawley Manor, Hawley, nr. Dartford, Kent.

WATSON—EVERATT.—At Busby West Church, Busby, on September 14, John Brownlie Watson, B.Sc., F.P.S., 4 Holm Street, Strathaven, to Joan Everatt, 15 Linwood Avenue, Clarkston.

#### **DEATHS**

BLOOMER.—On March 5, Kenneth Albert Bloomer. M.P.S., 19 New Road. Stourbridge, Worcs. Mr. Bloomer qualified in 1927.

McGREGOR.—Recently, Mr. Donald McGregor, M.P.S., 1 Victoria Square, Stirling, Mr. McGregor qualified in 1905. He was for many years in business in Stirling and was a former member of the town council and a magistrate. He spent several years in Ceylon.

MERSON. — On September 7, Minnie Gray Merson, wife of the late George F. Merson, F.P.S.. formerly of 7 Cumin Place. Grange, Edinburgh. 9, Midlothian.

PASSOFF. — On September 6, Theodore Passoff, M.P.S., 25 Chandos Road, Willesden Green, London, N.W.2. Mr. Passoff qualified in 1925.

PRONK.—On August 18, Mr. H. Pronk (purchasing manager. Polak & Schwarz International, N.V.). Mr. Pronk had been employed by Polak & Schwarz for over thirty-two years.

RICHARDS.—On September 5, Mr. David Richards, M.P.S.. The Medical Hall, Harlech, Merioneths. Mr. Richards qualified in 1927.

#### PERSONALITIES

MR. J. H. CUNNINGHAM, M.P.S., 7 St. George's Road, London, S.W.19, has retired. Mr. Cunningham opened a pharmacy in Wimbledon in 1937.

MR. H. B. SANDERS. M.P.S., manager of Harrogate branch of Boots, Ltd., retires shortly. Mr. Sanders, a native of Repton, studied at Nottingham university and qualified in 1922.

He was appointed manager of Messrs. Boots' branches at Knaresborough and Whitby before going to Harrogate.

DR. E. J. PAMPANA was recently awarded the Darling Foundation medal and prize for outstanding work against malaria, at a plenary meeting of the twelfth World Health assembly. Dr. Pampana was born in Italy, in 1895. He took his M.D. with honours at the University of Florence and obtained his diploma in tropical medicine and hygiene in London, From 1922–28 he was chief medical officer of mining companies in Colombia. From 1928-31, he was an assistant in the Institute of Hygiene at the University of Rome. Dr. Pampana commenced his association with international health work in 1931 as a member of the health section of the League of Nations. From 1933-38 he was Secretary of the Malaria Commission of the League. In 1938 he returned to Rome to become Chief of the Department of Epidemiology of the E. Marchiafava Institute of Malariology and in 1947 he joined the Interim Commission of the World Health Organisation.

Malariology and in 1947 he joined the Interim Commission of the World Health Organisation.

IN Britain on a private visit is a forty-eight-year-old Greek Cypriot pharmacist, Mr. Photis Apostolides. Mr. Apostolides, who is also an expert at compounding fireworks, says his Red Cross Pharmacy at St. Andrews Street, Limassol, is "just like an English pharmacy." It is visited by many English people in Cyprus. Mr. Apostolides deplores the fact that in Cyprus there are no fixed private for medicinal

there are no fixed prices for medicinal preparations. The same proprietary preparation is sold at different prices and by others than pharmacists. "Because of the differing prices people do not have confidence in the preparations. We had fixed prices in the war, at that time all medicine sales were in the hands of the chemists. Now we have to look to other lines—toothpastes for example of which we have thirty-two varieties now on sale because the profit on medicines is so Normal hours are, in summer, small. from 8 a.m. to 1 p.m. and from 4 p.m. to 8 p.m. "You are allowed to open at 5 a.m." explains Mr. Apostolides, "and although we shut at 8 p.m. we are usually working in the shop until 9 p.m. In winter the pharmacy is not closed at lunchtime. Whenever we do night service we are open from 8 p.m. to 11 p.m. in the summer: in winter from 8 p.m. to midnight. Mr. Apostolides received his training in the government hospital dispensary. The fireworks already referred to are both a hobby and "another line" in the busi-ness. Mr. Apostolides produced a set piece for the Coronation and, before the recent "troubles." used also to supply a set piece for the official

#### **OVERSEAS VISITS**

Queen's Birthday celebrations.

MR. L. O. SMITH (general manager, London branch of Parke, Davis & Co., Ltd.), left London on September 19 on a visit to the United States. In the course of his visit he will be attending a meeting at Detroit of the heads of the company's branches throughout the world.

## PHARMACEUTICAL SOCIETY OF NORTHERN IRELAND

#### Monthly meeting of Council

DEFICIT of £641 for 1958-59 was reported at the September Council meeting of the Pharmaceutical Society of Northern Ireland. Presenting the report of a Finance Committee meeting held on September 15, Mr. J. Kerr (chairman) said it had been held to review the balance sheet for the year, and to attempt to estimate the figures for the next two years.

He paid tribute to the secretary, Mr. W. Gorman, whose guidance had made possible a fair estimate for 1959-60. "But," he added, "1960-61 is difficult to estimate." The "rather large" deficit was due to the printing of the Society's Calendar which was responsible for £429 of the loss, leaving a net loss of £212 10s., slightly smaller than the previous year because an increase in the subscription for The Chemist and Druggist saved the Society £331.

Mr. Kerr said that examinations provided an excess of £434 against £828 the previous year. "It is that falling-off in examination fees that has caused deficits in recent years." The estimated deficit for 1959-60 should be about £300, if there was no unusual increase in expenditure and depending entirely on the amount of fees paid for the December (1959) and June (1960) examinations. Should that total be larger than last year, which was unlikely, the amount of loss would fall; should it be less, the deficit might reach £500 or £600.

#### An "Increasing Burden"

Mr. Kerr said 1960-61 would see the end of the old Part I examination and the number of new Part I candidates in June would be small. "Examinations are going to become an increasing burden on the finances of the Society and 1961-62 and 1962-63 are going to cost large sums of money," he declared. Mr. Kerr pointed out that the only ways of countering the trend of growing deficits were by increasing the registration fees of newly-qualified chemists and new students, which was not likely to raise any large amount because of smaller entries and fewer qualifications; by increasing the subscription to THE CHEMIST AND DRUG-GIST; by increasing licence fees which were now £3 3s. and which were paid to the Ministry of Home Affairs, from whom the Society received 50 per cent. They had not been increased since 1927. Finally, the Society could increase the retention fees which would raise a large sum of money; they were last increased four years ago. Mr. Kerr concluded that the Committee thought that the time and means of increasing the income of the Society should be decided by the Council and that no definite recommendations could be made at present. The report was adopted.

Mr. Kerr also presented a report of a Finance Committee meeting held on September 17, as a result of which a total of £443 was passed for payment.

#### Education Committee Report

Presenting a report of a meeting of the Education Committee, Mr. J. Gordon (chairman) proposed that twenty applicants should be admitted as students. He said the Committee had considered a letter from a student who had attended the Final Part II course and had enclosed a doctor's certificate to prove that during the last two months of the course he had been ill and had to abandon the examination. On investigation, however, the Committee found that the student's attendance had been poor—only 50 per cent.—during the whole year and, while he asked the Council for permission to do the autumn course and sit the examination in December, the Committee thought his poor attendance would render him unfit to sit the examination in Decem-

ber and recommended that he should attend a full-time course from September to June. The report was adopted.

The honorary treasurer's report for the year ended August 31 also showed a deficit.

#### A New Member of the Council

Mr. Norman Calvert Cooper, M.Sc., Lurgan, was nominated to fill the vacancy on the Council caused by the retirement of Mr. R. Gibson, O.B.E., to whose services several members paid tribute.

The secretary read a letter from Councillor P. A. Brady (a former president of the Pharmaceutical Society of Ireland) thanking the Council for their congratulations on his election as lord mayor of Dublin. The secretary also read letters from Mr. H. F. Moore and Mr. Kerr thanking the Council for their expressions of sympathy on their recent bcreavements.

The annual meeting of the Society was fixed for October 5, to be held at 7.45 p.m. at 73 University Street. The Council granted the Associates' Section of Ulster Chemists' Association permission to use the Society's main hall for the Associates' annual general meeting to be held at 7.45 p.m. on November 5.

The Council affixed the seal of the Society to the certificate of qualification of William Thomas Cochrane.

At the beginning of the meeting THE PRESIDENT (Mr. H. G. Campbell), who was in the chair, said he was pleased to see present again the vice-president (Mr. J. Caldwell) after having been ill in hospital, and also welcomed Mr. S. E. Campbell, Derry.

Also present were Messrs. G. E. McIlhagger, A. Templeton, W. J. Thornton, R. M. Watson, D. Moore, H. W. Gamble, W. H. Boyd, W. P. Ewart, W. Gorman, and Dr. R. G. R. Bacon.

Apologies for absence were received from Messrs. R. Gibson, W. S. Hall, F. R. Moore, J.P., H. F. Moore, C. A. Quinn and W. C. Tate.

At question time Mr. Gordon pointed out a mistake in the August 22 issue of The Chemist and Druggist. He said that the entrance requirements for registration, as published, were out of date.

## FIFTY YEARS AGO THE WINTER SESSION

#### From the C. & D., September 25, 1909

These bright autumnal days, so full of the sunshine which was denied us earlier in the year, scarcely warrant the arrival of the Winter Session, yet it has come, and next week the Pharmaceutical Society will assert the fact by opening the sixty-eighth session of the School of Pharmacy on Wednesday, when the inaugural sessional address will be delivered by Professor Dr. Alexander Tschirch, the distinguished pharmacognosist of Bern University, whom the Society will at the same time honour by the presentation of the Hanbury gold medal "for high excellence in the prosecution of original research in the chemistry and natural history of drugs." The occasion is in some respects exceptional, for rarely has the school session been opened before October, and we do not recollect a previous inauguration at which a Swiss professor has addressed the school. Will the Winter Session of Chemists' Associations be as distinctly novel? There are now over a hundred Associations in Great Britain, but only a minority of them are ever heard of; some because they are moribund, others because they have the happy knack of getting the members together and doing something for themselves without talking much (as far as we can judge from the Secretaries' reports), which may be reckoned to them as a virtue.

#### CONGRESS OF PHARMACEUTICAL SCIENCES

#### Diary of events at Zurich

MORE than 500 delegates from over thirty countries attended the nineteenth Congress of Pharmaceutical Sciences, organised by the Scientific Section of the International Pharmaceutical Federation, in Zurich during the week beginning September 5. Representatives attended from most European countries, Canada, North and South America, Japan, the Phillipines, India and several Middle East countries. Most countries from behind the Iron Curtain except Russia were represented, but apart from Egypt there were few delegates from Africa.

Registration took place in the eighteenth-century Guildhall Zur Meise and in the evening a reception was held in the same building. The evening was mainly devoted to reunions of regular attenders of International Pharmaceutical Federation functions and introduc-

tions of new delegates.

Local interest in the Congress was shown by the publication of an article on pharmacy by Professor Buchi in the Neue Zürcher Zeitung and by the presence at the opening ceremony of officials of both the city and canton and from all the Swiss universities and pharmacy schools as well as representatives of most branches of Swiss pharmacy and medicine.

#### **Opening Ceremony**

At the opening ceremony on September 7 the programme of the Congress was introduced by the president of the Scientific Section, Professor R. Ruyssen, who pointed out that there were papers on many aspects of pharmacy and related subjects such as pharmacology, pharmacognosy and pharmacology,

maceutical chemistry.

The speech of greeting by Sir Hugh Linstead, President of I.P.F., has already been reported (C. & D., September 12, p. 173). The first symposium paper was given by Professor S. A. Schou, entitled "Stability of Medicaments (general introduction, problems and methods of testing stability)." Professor Schou referred to the increasing interest that was being taken in the problems of stability and discussed the attitude of various pharmacopæias to the subject. He mentioned the British Pharmacopæia as having taken a practical point of view in the matter by giving indications, wherever possible of the length of time preparations could be expected to retain their potency. He also referred to the Danish system whereby preparations were classified into groups—those for immediate use; those with a short shelf life and others for which it was considered necessary to allocate a validity period.

The second paper dealing with "Decomposition of medicaments due to physical changes" was read in French by Professor M. Guillot, Professor of Physics in the University of Paris, Professor Guillot's paper ranged from the effect and action of irradiation, to the factors concerned with the stability of emulsions and suspensions.

The third paper had been prepared by Professor E. H. Vogelenzang, Professor of Pharmaceutical Chemistry at Leiden University, and was originally intended to be presented in German. In the unfortunate absence of the author through illness, a summary of the paper was read in English by Professor Schou. It was entitled "Decomposition of medicaments due to chemical changes" and referred to the increased stability that could often be obtained by reducing storage temperatures and adjusting the pH value.

The afternoon session was taken up with papers in the various sections: pharmacognosy, pharmaceutical chemistry and biochemistry, galenical pharmacy and biology and pharmacology.

#### **British Contributions**

British contributors gave the opening papers in the first two sections, Dr. J. W. Fairbairn and P. N. Surval speaking on "The determination of the alkaloids by paper chromatography and other methods" and Dr. A. H. Beckett on "Stereochemical factors in medicinal chemistry." Four other papers presented on September 8 were in English one on new radio-opaque materials from Poland; the determination of N.D.G.A. (nordihydroguaiaretic acid) antoxidant in oily vitamin preparations, from Denmark; the effect of hydrogen peroxide on hypertensive rats, from Canada, and the estrogenic effect of penicillium mycelia, from Hungary. The latter presented by Dr. Judith Kulscar-Gergely, of the Medical University Debrecen. Since some samples of purified penicillin had been found to be æstrogenic, Dr. Gergely examined samples of penicillium mycelia to see if that activity was due to an impurity produced by the mycelia. She found that they contained a very potent æstro-

The early session on September 9 was occupied by the fourth symposium paper "Decomposition of medicaments due to the action of bacteria and fungi" read in German by Dr. R. Munzel of Hoffman la Roche. He described the results of the growth of micro-organisms and discussed the physical and chemical methods adopted to prevent the biological process.

The remainder of the day was occupied by papers in the various sections. Dr. Fairbairn took the chair in section I where two papers were presented in English—on the constituents of Pueraria

roots (a Chinese drug "ko ken") by five Japanese workers, and studies on diocotorin, a toxic peptide from viscum

album.

The only paper in English in section two was on the infra-red and ultraviolet spectrophotometric processes in the U.S.P. XVI, read by Dr. A. Osol which gave an account of the value and limitations of those procedures as pharmacopæial tests.

In section 3, Dr. H. S. Bean outlined his research into solubilisation by means of surface-active agents. He mentioned the effect of the compounds in solubilising disinfectants and oils and discussed factors affecting activity and stability.

In section 4, Dr. Auslander of Israel gave the result of preliminary pharmacological tests on a new antibiotic discovered in Haifa Israel, which showed great promise in the treatment of amœ-

bic infections.

Dr. Schulta of Arnhem discussed the significance of blood pH determinations, and Dr. T. D. Whittet, London, described the results of an extensive series of pyrogen tests of water from deionising plants. He showed that although the usual column-type plants can and usually do give pyrogen-free water, those available at present cannot be always relied upon to do so. He also gave results showing that measurements of specific resistance on conductivity of water cannot be relied upon as indications of presence or absence of pyrogens. Dr. J. March of Denmark presented a valuable paper on the biological assay of adrenaline and noradrenaline in injections.

During the evening all the members of the Congress joined the steamer "Linth" for an excursion on the Lake of Zurich. The earlier part of the trip was spent in admiring the view as the ship sailed along the lake to the historical and beautiful town of Rapperswill. After darkness fell, light refreshments were served and congress members renewed acquaintances and made new

friends.

The first session on September 10 was taken up by the final symposium paper read in English by Dr. T. D. Whittet on decomposition resulting from excipients and containers and its prevention. Later further papers were presented in the various sections. Five were in English: "The determination of diene conjugation as an evaluation of antioxidants" by Dr. T. Tukamato (a hospital pharmacist of Nagoya, Japan); "Stability of reserpine" by O. Weis-Fogh, Denmark; "A stability study of amino ethyl nitrate and some related com-pounds" by Dr. Spross, Sweden, "The correlation of oven testing with field storage" by Mr. G. R. Wilkinson, storage" by Mr. G. R. Wilkinson, Ware; and "Some observations on the sterilising effect of ethylene oxide" by Mr. N. Diding of Sweden.

#### **Future Activities**

In the early evening there was a meeting of members of the sections at which the rules for presentation of the Höst-Madsen medal and the plans for the sections' activities at future meetings were discussed. The details for next year's meeting at Copenhagen are being announced after they have been approved by the Bureau of F.P.I. at their meeting in Madrid. It was decided to hold the 1961 meeting in Northern Italy, probably at Pisa.

The early morning of September 11 session was taken up by discussion of the five symposium papers led by Professor Fluck who commented on each paper in turn. The subject was then thrown open to general discussion and

a lively debate took place and eventually had to be curtailed to allow time for the closing session. The questions and answers in the debate were translated into English, French and German.

#### Closing Session

On the invitation of Professor Ruyssen, the secretaries of the various sections summed up the work of their respective sections and Professor Buchi gave some comments on the meeting as a whole,

Sir Hugh Linstead in closing the meeting paid a warm tribute to the "triumvirate of Professors" Buchi, Fluck and Steiger, and to all the Swiss pharmacists who had made the Congress such an outstanding success. He commented that he had found that if the languages used were classified in order of those who understood them the result would be English, German and French in that order. In view of that it was interesting to note the following numbers of papers in each language: English, twenty-three; German, twenty-eight; French, thirty.

Immediately after the closing session most of the delegates embarked on motor coaches for the "Pharmaceuticobotanical" excursion. They were divided into English, French and German

speaking groups.

Lunch was taken at the beautiful and interesting town of Einsiedeln, with its magnificent square, baroque cathedral and monastery, on a hill above. The

cathedral is used as a theatre for openair plays during the summer, providing a magnificent setting. The interior of the cathedral is probably one of the most colourful in Europe, if not the world. Near the town is a wide and deep artificial lake. The alchemistapothecary physician Paracelsus was born in the neighbourhood of Einsiedeln. The journey was then continued along a narrow mountain road with a rough dusty surface to the remote caféchalet of Ibergeregg magnificently situated giving a wonderful view of the mountains and glimpses of the Vienvaldslattesee (Lake Lucerne).

There the delegates proceeded on foot to the summit of a nearby mountain by a steep but not precipitous path. On the way the pharmacognosist Professor Fluck enthusiastically pointed out the many interesting medicinal plants and gave brief comments on them. Many areas were literally carpeted with the beautiful autumn crocus (colchicum autumnale). Blue and yellow gentians, alpine plantain, and filix mas were also seen. The return visit led through the William Tell country and Schweiz where the Federation of Switzerland was founded, then back along Lake Zug.

September 12 was devoted to visits to the pharmaceutical industries in Basle. A special train left Zurich at 8.15 and parties were conducted round one of the works of the following firms:—Messrs. CIBA, Ltd., Geigy, Ltd., Hoffman la Roche, Ltd., and Sandoz, Ltd.

over-run for half an hour. The total time for discussion was thus ninety minutes. Because of the need for translations the range of discussion and the number of members who could take part was severely restricted. It might have been better to have each paper at a separate session, followed by discussion on that aspect of the subject or all the papers in one day followed by a full morning or afternoon discussion session on the next.

### Correspondence

#### **Price Notifications**

SIR,—It seems that a new low level in business manners has been reached by the makers of Lucozade, etc., in advertising important price reductions in the newspapers without ensuring at least simultaneous notification to the trade.

Donald S. Rogers,

Nottingham

[On inquiry the following comment was given to the CHEMIST AND DRUGGIST by Mr. J. D. Smartt (managing director, Beecham Foods, Ltd.): "After consultation with the postal authorities, letters informing all our customers of the new prices and terms were posted to arrive as soon as or sooner than the appearance of any advertisements. We wish to apologise for any inconvenience caused to those who, despite our precautions, did not receive notification until after advertisements had appeared."—EDITOR.]

#### Explanation

SIR, — The letter written by Mr. Harold Procter-Smith which appeared in The Chemist and Druggist (September 5, p. 159) prompts us to reply in case a similar state of confusion exists among your other readers. It is not our intention to enter into any discussion on the policy or action of the Council of the Pharmaceutical Society, but we would explain that the full-page advertisement to which your correspondent refers is quite correct when it describes Distaval (thalidomide) as a safe sedative and particularly suitable for children and the aged; it is also true to say that it has no untoward side-effects, and there is plenty of clinical evidence to support those claims. Consequently, that special freedom from toxicity puts Distaval outside the usual restrictions of that class of medicament. In spite of the drug's exceptional safety it has never been the policy of The Distillers Co. (Biochemicals), Ltd. to encourage self-medication by the public. In fact in January 1958 before marketing the product we wrote to the Pharmaceutical Society's Council asking for its approval and support for a statement to that effect. No doubt Distaval has been included in the list of drugs which the Council recommends be supplied on prescription only as a result of that earlier request. The claims for the product can be properly substantiated and we feel that pharma-ceutical trade journals are correct media through which to inform the pharmacist of its properties.

THE DISTILLERS CO.

THE DISTILLERS CO. (BIOCHEMICALS), LTD., London, S.W.19

#### **IMPRESSIONS OF ZURICH**

#### Praise for the organisers of the International science sessions

COMMENTING on what he observed at the meetings of the International Science Congress at Zurich recently, Dr. T. D. Whittet writes:—The arrangements throughout the Congress were very efficiently organised and everything went smoothly throughout the week. The meetings were held in the physics department of the University, a fine new building with splendid lecture theatres. The Grosser Hörsall in which the opening and closing sessions and symposium were held is a truly magnificent theatre with every possible device. The principal speakers were each provided with a small radio transmitter. the microphone of which was attached to the coat lapel. The speaker's voice was then amplified and transmitted to all parts of the theatre. During the symposium discussion an apparatus of similar type was passed to each member who indicated his wish to speak. The method has much to recommend it. It does not tie the speaker to a fixed microphone and he can turn to the blackboard or explain lantern a slide without becoming inaudible to many of the audience. In discussion it eliminates the need for members of the audience to come to a fixed microphone to speak, and thus avoids confusion. One attendant can quickly pass the microphone to each speaker.

Another useful procedure was that

another useful procedure was that each paper was allocated a specific time of starting and allowed a definite period for presentation and discussion. If a paper did not occupy the full half-hour allowed there was a pause until

the advertised time of the next paper. The method may lead to some waste of time, but when several sections are running simultaneously it is most helpful to know exactly when any particular paper will be starting. Now that the British Pharmaceutical Conference has had to arrange for two simultaneous sessions some such scheme might well be adopted. It is most frustrating to hurry from one section to another to hear a special paper, only to find that it has been taken unexpectedly early.

Language remains a problem. At the main sessions announcements were made in the three languages, English, French and German, and in that respect the Congress was an improvement on many previous ones. The proceedings are thereby prolonged, but the alternative of simultaneous translations is probably prohibitively expensive. Many of the papers in French and German were, from their titles, obviously of great interest to British pharmacists, but their ability to join in the discussion was impaired by the language barrier. Similar problems must face the pharmacists of other countries, The solution of the dilemma seems remote.

One minor criticism applies to the arrangements for the symposium. Three papers were taken on the first morning, one each in the second and third mornings and an hour and a half was allocated for the general discussion on the fourth morning. Half an hour of it was taken up by Professor Flück's commentary on the papers, and to make up for it the session was allowed to



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#### Patents as Property

THE chairman of the British Pharmaceutical Conference, in his opening address at Bournemouth on September 21, dealt with the many problems attending the acquisition and exploitation of those valuable pieces of industrial property: chemical patents. Though "letters patent" may not fit in with the more common conception of property as something concrete and tangible, they are often of greater capital importance than the premises or plant that have to be erected to carry out the process described in the patent. Like "real" property that may often be taken over by a local authority or a Government for purposes considered more suitable for the community, patents are vulnerable to attack by interested parties. And, like plant and machinery, they may be rendered obsolete overnight by new techniques and new processes.

The background of patents legislation is that an inventor is entitled to some rights and rewards for his discovery and to the means whereby he can legally enforce his rights. Mr. Treves Brown showed that, although in those matters the inventor's position is generally recognised and acknowledged, he or his firm must go to some lengths, and pay substantial fees, before the patent is granted. Whilst we do not suggest that there should be any lessening of the safeguards surrounding the grant of those monopolies, it would be advantageous to industry, and to the pharmaceutical industry in particular, if some means could be found of speeding up the necessary administrative and investigation processes prior to the issue of patents.

When the patent is finally granted the patent holder has to reimburse himself for the research work of which it was the outcome, and in the pharmaceutical field the holder of a patent covering the manufacture of a medicine has small hope of keeping solely to himself, for the sixteen years' validity period of the patent, the market for the medicine. Often he has to be satisfied with but a two-year or three-year lead over his competitors. During that time—less than one-fifth of the theoretical validity of the patent—he has to ensure a satisfactory return for his research work. As Mr. Treves Brown pointed out, industrial research must cease without a satisfactory return for such expenditure.

Over the years the British pharmaceutical industry has built up a valuable ownership of property of this valuable but intangible kind. The patents which British manufacturers hold in countries overseas are equally important, many of them valid only because of the existence of comparable patents in this country.

The subject of the Conference chairman's address was particularly opportune because patents are becoming more and more the foundations upon which the pharmaceutical industry is being extended and developed. Anything that can be done to ensure that a chemical or pharmaceutical patentee benefits more promptly, and to the maximum extent compatible with the long-term advantage of the community, must be a factor in stimulating further research and is therefore to be pursued. An essential step is to ensure, as Mr. Treves Brown has done, that those engaged in the scientific aspects of pharmacy should be well informed on the nature of the problem.

#### Trends in Pharmaceutical Science

A REVIEW of the titles of the papers that are being presented at the science sessions of the British Pharmaceutical Conference this week may suggest that 1959, from being the Geophysical year, has become the Pharmacological. The year might even be said to be a ganglionic-blocking-agents vintage, for four out of the first five papers have to do with that subject and they are all in the heavyweight class. Rightly and inevitably pharmacology is coming to loom ever more large in the field of pharmaceutical science, and it is significant that quite a number of the papers describe simultaneous chemical and pharmacological investigations—a sure indication that the concept of "medicinal chemistry" is influencing thought among pharmaceutical scientists. But we would put in a plea. New concepts and new compounds are of their nature harder for Conference members to think usefully about than subjects with which they start with a certain familiarity. It is possible to take the view that one's subject is too difficult anyway for any who have not studied it at least up to Ph.D. level. That way the author makes no concessions, leaving in the shorthand jargon that has saved him so much time in doing the work. His code will, be understood by the small coterie of those who are working in the same field, and the rest, perhaps, may not count. The author accordingly may write glibly of compound 9F or 10G. That is all very nice for the author, but it may be less good for the future of the Conference. Within recent memory the British Association for the Advancement of Science set itself deliberately to popularise its proceedings. Surely the British Pharmaceutical Conference [for the advancement of pharmaceutical science] should think seriously about following that example. We are far from suggesting anything in the nature of "French Without Tears" or a "Business Man's Bible." A scientific paper is a scientific paper and cannot be a child's garden of verses. Some authors have fortunately shown that a scientific subject can be plainly expounded.

We may legitimately draw attention to one paper that is in a special category in dealing with an old familiar subject—emulsions made with gum acacia—with which every practising pharmacist can claim a nodding acquaintance. The author of the paper applies to that substance, regarded as an ingredient in emulsions, a brilliant piece of observation and deduction. The outcome of his study seems to be that one more of the "secundum-artem" operations of traditional pharmacy has been reduced, or in process of being reduced, to a matter of known science. That result, of course, is well in line with the philosophy of Professor Berry when he set the School of Pharmacy, University

of London, on its present path. A whole mythology of emulsion-making may, from the findings, have become exploded, though to produce the emulsion in the dispensary will still require, we think, craftsmanship. For that paper alone the science sessions are worth the attention of those practising pharmacists who too readily dismiss the whole of the scientific side of the Conference as being over their heads. But there are other subjects of equal closeness to everyday pharmacy. Toxic nectars and the possibility that they may enter honey; the mechanism by which insects create galls on plants; membrane filters; catgut storage and other subjects should all appeal to the practising retail pharmacist as having some point of contact with his means of livelihood, even if only to help him in answering customers' questions.

The splitting of the science sessions into sections running simultaneously is a practical expedient made necessary by the number of papers to be discussed, and perhaps only the Press starts off with a bias against the dichotomy. Whether other members find it acceptable or irritating must depend on the discrimination shown in allocating the papers to the sections, a question to which only experience can provide the answer. If there are members who have occasion to visit both sections during a morning or afternoon, it may prove an advantage in the future to adopt the system followed at Zurich this year (see p. 226), by which each paper begins at a preannounced time.

Written before the sessions take place, these observations obviously take no account of the discussions, to which we may return at a later date.

## PHARMACIES OF BRITAIN—83



LITTLE GARLAND PHARMACY, BEACONSFIELD

With a shopfront that is a pleasing copy of a period piece, the Little Garland pharmacy at Beaconsfield, of which Miss V. M. Tidy, M.P.S., is the proprietress, is in premises that date back to Tudor times. There is a Tudor chimney-place in the shop, and an ancient brick stack may be seen outside. The conversion to use as a pharmacy took place probably about fifty years ago. Miss Tidy's father, the late Mr. Albert Tidy, M.P.S., was proprietor of the business before she took over and there was at least one previous owner.

## SYNTHESIS OF MEDICINAL SUBSTANCES

### Its principles illustrated by recent examples

A. E. WILLIAMS, Ph.D.

THE vast majority of syntheses are carried out in university and similar laboratories. While such work serves to establish or confirm the constitution or structure of a specific substance, and simultaneously forms a rung in the ladder to a higher degree for the investigator, it cannot be regarded as much more than academic gymnastics, since such substances are rarely put to commercial use. It is in the research laboratories of the drug and chemical manufacturers that useful methods of synthesis are evolved; the object being to create a product of higher purity at lower cost, or to increase its availability.

Unlike the synthetic processes now employed in the huge hydrocarbons industry, wherein the starting materials are the elements carbon, hydrogen and sometimes oxygen, or simple compounds of them, the synthesis of medicinal products generally involves the use of starting materials as complex in composition as the substances to be synthesised. The synthesis consists of exchanging one group for another and, in some instances, of "protecting" or preventing a particular group from interacting while other reactions are taking place. Nearly all such syntheses are carried out in multi-stage operations, each stage effecting a further change in the substance being handled until finally the product desired emerges. Of medicinal substances now produced synthetically, corticosteroids, vitamins, alkaloids, peptides, camphor and glycerol are among the more prominent.

#### Corticosteroids

The medical field is making increasing use of steroids of various types, and the preparation of suitable products has been greatly facilitated by improved methods of biological oxidation. The most important group of steroids to be developed in recent years is that of the cortisone type. Methods of synthesis employed commercially involve creating the necessary steroid skeleton from simpler substances that may be obtained in sufficient quantities. Over the past decade the adrenal cortical hormones, or corticosteroids, have become important therapeutic agents in the treatment of rheumatoid arthritis, psoriasis, and other diseases. Unlike many other modern medicinal substances, those hormones do not attack microbes, but serve rather to correct a disturbed metabolism that is causing the disease. In that way they simulate the natural hormones, one of which is hydrocortisone, which is secreted by the adrenal glands situated at the top of the kidneys.

One of the raw materials for the manufacture of corticosteroids is the adrenals of cattle, but as about one ton of raw material is required to yield 1 gm. of cortisone, a great deal of investigation has been carried out to devise a less cumbersome technique. Cortisone can be obtained synthetically from desoxycholic acid in a succession of steps but, as the principle source of that acid is bile, the process entails the handling of a large amount of raw material to obtain cortisone or other corticosteroid in commercial quantities. Thus the corticosteroid plants are big in relation to output of finished product.

The carbon ring structure of desoxycholic acid is similar to that of cortisone (see next column).

Hydrocortisone has the group HO in position 11 of the carbon ring, while cortisone has one oxygen only in that position. Much research has gone into the microbiological processes for introducing oxygen at position 11. The development of bio-oxygenation techniques for introducing an

atom of oxygen at the 11 position represents a major advance in steroid chemistry. As an alternative to bile acids for raw material, ergosterol, which could be available in the required quantities, has received much attention. The conversion of ergosterol into cortisone is done in stages, the first of which involves the production of an 11-oxygenated derivative,  $3-\beta$ -acetoxyergost-22-en-11-one. That is followed by degradation of the side chain by a process of ozonolysis which yields  $3-\beta$ -acetoxy-11-ketobisnor-allo-cholanate. That is converted into  $3-\beta$ -hydroxy-allo-pregnane-11:20-dione, which yields cortisone. Other sterols of vegetable origin include cholesterol and stigmasterol, and the use of those compounds for cortisone production takes much the same route as for ergosterol.

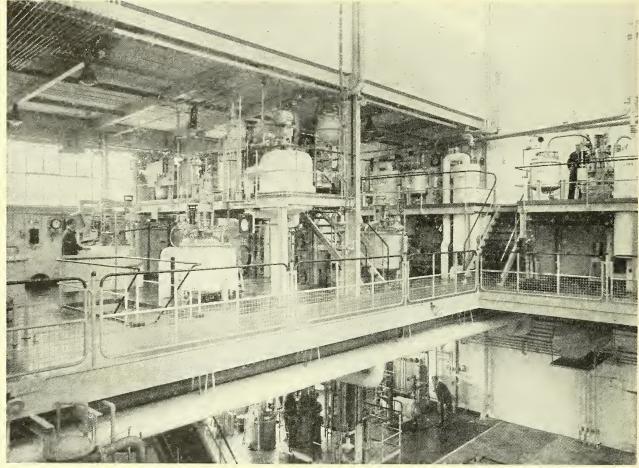
Certain sapogenins, such as diosgenin and hecogenin, also form the material from which cortisone is manufactured; the carbon skeleton of cortisone is already present in such materials, but the structure has to be modified and the route is a long one in each case. In the application of cortisone compounds, hydrocortisone behaves differently from cortisone; while the acetates of the two compounds have their own specific applications. For the treatment of ketosis in cattle it is reported that hydrocortisone is more effective than hydrocortisone acetate and cortisone acetate more effective than 11-keto-progesterone. Both cortisone and hydrocortisone may be converted to the corresponding 21aldehydes through intermediate formation of the nitrones, and the products obtained have applications in veterinary medicine. The hormone cortisol may be prepared from cortisone by acylating the 11- $\beta$ - and 17- $\alpha$ -hydroxyl groups in the cortisone molecule, then hydrolysing the esters so obtained.

#### Vitamins

While vitamins occur in many natural materials, the chemical structure, or even the composition, of some of them is not yet fully understood; so that it is not possible to produce such substances synthetically. In a few instances, however, extensive study of the composition and chemical structure of the natural products has enabled a similar substance to be manufactured synthetically; examples of which are vitamins A and C.

The presence of the substance now termed vitamin A was known some forty-five years ago to exist in butter, cod-liver oil, etc. It was isolated as far as possible at that time, but it was not until 1931 that its composition and structure was finally established as  $C_{20}H_{20}O$ .

No practical method for its synthesis, however, was established until 1947, when O. Isler and co-workers, at the Roche laboratories in Basle, evolved such a method. The task was not easy because the synthesis of the compound



General view of the main production room of the vitamin A plant of Roche Products, Ltd., at Dalry, Scotland.

from any of the available raw materials involves a number of stages, and the intermediate products are sensitive to chemical manipulations. In its commercial production, a raw material largely used is citral, which is present to the extent of about 70 per cent. in lemongrass oil. As citral has the composition C<sub>10</sub>H<sub>16</sub>O, while vitamin A is C<sub>20</sub>H<sub>30</sub>O, the synthesis involves the addition of 10 carbons and 14 hydrogens, and that is done in a number of stages. The first is the preparation of  $\beta$ -ionone by the condensation of citral with acetone. Purification of the ionone is accomplished by distillation under high vacuum, the distillate being condensed with methyl chloroacetate to give a β-C<sub>14</sub> aldehyde; thus 4 carbons have been added. Meanwhile a separate process is being carried out to provide a C6 side-chain in accordance with the structure of vitamin A. For that purpose an ethinylation reaction is carried out with acetylene in liquid ammonia and methylvinylketone, using lithium as a catalyst. The product from the reaction is methylpenteninol-3, which is converted to methylpenteninol-1 by treatment with acid. Those materials are alcohols, and both are rectified under high vacuum, though only the second of them goes further into process.

The next step is to combine the  $\beta$ -C<sub>14</sub> aldehyde with the methylpenteninol-1, which provides the necessary C<sub>6</sub> sidechain. It is done with the aid of a Grignard reagent to yield the C<sub>20</sub> compound, acetylenediol. Some modification is necessary in order to impart the double-bond structure, and that is done by selective hydrogenation of the acetyl-

enic bond, whereby the C20 acetylenediol is converted to C20 diol. The latter is acetylated to yield vitamin A acetate. Both the C20 compounds are yielded in the form of crystals, and their purification is of prime importance in preparing pure vitamin A. As the latter now enters into the composition of many manufactured products of diverse character, the vitamin is made available in different forms, such as acetate, palmitate, and as oily dilutions. Investigations show that synthetic vitamin A is equal to the natural product in stability and excels it from the criterion of flavour. In baked foodstuffs, about 85 per cent. of the vitamin remains after the baking process. In margarine containing 5 per cent. sesame oil, vitamin A remains stable after forty-two weeks' storage at a temperature of 80° F. For pharmaceutical preparations the use of vitamin A in an appropriate form facilitates the manufacture of stable products.

#### Synthesis of Vitamin C

The synthesis of vitamin C—ascorbic acid—uses monosaccharoses as the starting material, such as galactose, mannose, fructose and glucose, all of which have the general composition C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>, but different structures. Synthetic ascorbic acid was first produced by Haworth and Reichstein in 1933, and in the years following other materials, such as calcium galacturonate² were used successfully. Since the synthesis is a multi-stage one, irrespective of the raw material chosen, cost and availability of that calcium salt are often the deciding factor in the process. Of the various sugars it is feasible to use, d-glucose is the cheapest, and that is now commonly employed in large-scale production. From it, d-sorbitol is obtained by hydrogenation. The d-sorbitol is then converted to 1-sorbose by bacterial oxi-

dation. The product, diacetone-1-sorbose is next obtained by reacting the 1-sorbose with acetone, that stage of the process being undertaken to protect the primary alcohol group. By oxidising, and then hydrolysing, the diacetone derivative, the product 2-keto-1-gulonic acid is yielded. That is reacted with methyl alcohol and hydrochloric acid, followed by sodium methoxide, and again with hydrochloric acid, to yield 1-ascorbic acid. The final steps involve a process of enolisation, an enol being a compound having an alcoholic group and an ethylenic group in combination. The successive stages in the synthesis create a structure entirely different from that of the raw material, as may be seen by comparing the structure of glucose and that of ascorbic acid:—

CHO 
$$HOC = COH$$
 $(CHOH)_4 \longrightarrow HOCH_2CH(OH)CH C=O$ 
 $CH_2OH$ 
Glucose Ascorbic acid

#### Alkaloids

Alkaloids are basic nitrogenous substances which for centuries have been extracted from plants for use in the medical field. With the advance in science during the twentieth century, it was possible to ascertain the chemical structure and composition of many of those substances and produce some of them synthetically. Both tropinone, C<sub>8</sub>H<sub>13</sub>NO, and tropine, C<sub>8</sub>H<sub>15</sub>NO, were synthesised by Willstätter during the first few years of the present century, using a suberone, or heptamethylene, as the starting material. That was converted to cycloheptene-dibromide, and then to a corresponding triene. A hydrobromide from the latter was reacted with dimethylamine, a derivative of which was tropidine. From that, by the addition of hydrogen bromide, followed by hydrolysis, the product pseudotropine was yielded which gave tropinone and tropine when subjected to oxidation and reduction:-

Another alkaloid is papaverine,  $C_{20}H_{21}NO_1$ , which was thought to consist of dimethoxybenzene joined through a  $CH_2$  group to dimethoxyisoquinoline. In 1909 Pictet and Gams carried out a synthesis in which the product veratrole was converted by a Friedel-Crafts reaction to acetoveratrone, and that, in turn, was converted to an amine by reaction with an oximino compound. A veratraldehyde derivative was condensed with the amine already prepared, to yield an amide which was reduced and dehydrated to yield papaverine. The substance is now generally recognised to be 3.4-dimethoxybenzyl-4'5'-dimethoxyisoquinoline, with the following structure:—

A simplified method of synthesising tropinone, wherein only three stages were needed to complete the synthesis, was evolved by Robinson in 1917, using acetone-dicarboxylic acid.

Morphine, C<sub>17</sub>H<sub>10</sub>NO<sub>3</sub>, was first synthesised in 1949 by R. Grewe, using 2-carbethoxycyclohexanone. Further work

on the problem yielded alternative methods, and in 1954 details of one such technique were published by Ginsburg and others<sup>3</sup> in which the piperidine ring was built up in the reverse direction from that used by earlier workers. Starting from cyclohexanone and o-dimethoxybenzene, a 15-stage synthesis yielded dihydrothebainone, from which morphine can be obtained by methods already established. The precise structure of a morphine molecule is still a controversial topic, but the following has been accepted in many quarters:—

Against that, evidence from synthetic and degradation work suggests the structure given below as the morphine conformation. In it the chair-type rings B and C are fused in the cis position, the N-ring thus being trans to ring C. Alternatively, the stereo requirements of the 4-5 ether-bridge may favour the less stable boat-form for ring C:—

Suggested morphine conformation

At the present time much attention is being given to compounds related to morphine, and in the medical sphere such substances are found to be more effective than morphine itself. One of them is 14-hydroxymorphinone, prepared by oxidising thebaine, with potassium dichromate and sulphuric acid, and demethylating the resulting 14-hydroxycodeinone. That product is considered to be twelve times as active as morphine.

#### Peptides

Techniques for the construction of peptides containing aminoacids in the required order have been developed within the past decade, and progress has been made in the methods of group protection as well as in the joining together of amino- and carboxyl-groups. One of the major achievements in this field is the synthesis of oxytocin by du Vigneaud and others4. Those workers, following upon their molecular structure studies on the vasopressins, achieved the synthesis of the compound. Four structural analogues of oxytocin have also been synthesised and investigations made on their pharmacological properties. Synthetic oxytocin has been found to contain a valine residue instead of the isoleucine residue found in the natural product. The synthetic substance is found to have strong oxytocic properties, but normally shows variable quantitative differences from the natural material.

In the synthesis of those substances, a direct condensation method has been devised which makes use of substituted carbodi-imides. They are added in the cold to a mixture of suitably protected amino- and carboxy-components in a solvent. The principal reaction is the synthesis of a peptide-bond, and the simultaneous addition of a molecule of water to the product to yield a substituted urea. The technique is also applied to the synthesis of some types of polypeptides. Other investigators have synthesised in high yield a number of peptide derivatives by using decyclohexylcarbodi-imide, commonly termed DCC.

Camphor

Camphor is an important product in the celluloid and cellulose nitrate industries (in which it is employed as a plasticiser) as well as serving as a base for many pharmaceutical preparations. The natural product for many years came from Formosa and Japan but alternative sources have been developed as supplies from those areas depend upon the political situation. In South Africa and India the cultivation of the plant Ocimum kilimandscharicum is being extended. The plant contains about 3.3 per cent. of oils comprising 10 per cent. alpha-pinene, 70 per cent. camphor, with small proportions of limonene and terpinolene.

Since supplies of natural camphor have for some years been unreliable, an impetus has been given to its preparation synthetically, and the synthesis of camphor has become a well-established practice. A difference between the natural and synthetic product is that the former is dextro-rotatory, the latter is optically inactive—a feature that enables the analyst to identify them. The material for synthesis is pinene, which may be either the alpha- or beta-variety. Thus the synthesis of camphor is closely related to supplies of pinene, and the new plantations in South Africa and India are therefore the source of natural camphor and pinene for synthetic camphor.

The synthesis is carried out in several stages and involves the conversion of pinene to bornyl chloride by reacting the pinene with hydrochloric acid vapour at a temperature a few degrees below zero C. The chlorinated compound is next heated with acetic acid to yield isobornyl acetate which, upon hydrolysis, gives isoborneol. That, in turn, is oxidised, either with chromic acid or nitrobenzene, to yield camphor. The reactions taking place are represented by:-

In some cases these reactions are carried out only until isobornyl acetate is obtained. The product is used in perfumery, and a few years ago the Japanese protected a method<sup>5</sup> for its preparation in 82 per cent. yield from pinene.

Since synthetic camphor is based largely on pinene, from the inception of the process attempts have always been made to obtain that product as cheaply as possible. One of them concerns the recovery of pinene as a by-product

of the cellulose industry.6 By fractional distillation of sulphate turpentine, which is a waste product of the industry, an oil containing about 40 per cent. of pinene may be obtained, and that is said to be sufficiently pure for the synthesis of camphor.

#### *Glycerol*

Glycerol has for many centuries been well established in the pharmaceutical field, and still maintains its important position there, as in other spheres. Until a few years ago, however, with the exception of a small amount from sugar, practically all the glycerol of commerce was obtained as a by-product of the soap-making and fat-splitting industries. Its availability and price were, therefore, always dependent upon the state of those industries. Over the past decade the production of synthetic glycerol has gradually increased and at the moment is well over 50,000 tons annually.

The two chief synthetic methods in use are both based on propylene. In the first, glycerol is obtained through the allyl chloride and allyl alcohol route; while in the other, propylene is oxidised to acrolein which, in turn, is oxidised to glyceraldehyde from which glycerol is obtained.

The initial step in the first method is the chlorination of propylene to yield allyl chloride, from which allyl alcohol, CH<sub>2</sub>=CHCH<sub>2</sub>OH, is produced by the addition of a hydroxyl group. The allyl alcohol is then chlorohydrinated with the aid of hypochlorous acid to yield  $\beta$ -chlorhydrin which, when hydrolysed by the use of a caustic soda solution, yields glycerol. The reactions taking place are as follows:—

$$\begin{array}{c|cccc} CH_2OH & CH_2OH \\ | & & CHOH \\ | & & CH_2CI \\ & & & Ally1 \\ & & & acid \\ \end{array}$$

An alternative technique to the foregoing is to chlorinate the propylene with sufficient chlorine to give trichloropropane, via the intermediate product allyl chloride. The tricompound is then hydrolysed to yield glycerol. The advantage of the second method is that a glycerol entirely free from chlorine or its compounds is obtained, and the various stages in the synthesis are represented as follows:-

Caustic

soda

Glyccrol

Salt

Other methods for the synthesis of glycerin, apparently not yet established on a commercial scale, include the condensation of carbon monoxide and formaldehyde to give glycollic acid, reaction of that with a formol, and finally the alcoholysis of a formaldehyde derivative of glycerin. Glycollic aldehyde and nitromethane, or formaldehyde and nitromethane, are also capable of yielding glycerol.

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Beta-chlorhydrin

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#### BRITISH PHARMACEUTICAL CONFERENCE

Ninety-first meeting, Bournemouth, September 21-25

## Patents in Pharmacy and Medicine

CONFERENCE CHAIRMAN'S ADDRESS

THOUGH claiming only the status of a "keenly interested amateur," Mr. H. Treves Brown (chairman of the British Pharmaceutical Conference) gave in his formal address at the Conference opening session a masterly review of the present position as to "Patents in Pharmacy and Medicine." He begun by outlining the legal requirements and the procedure for obtaining a chemical patent in this country, and then went on to describe some of the problems involved in obtaining corresponding patent protection overseas, and to deal with some special considerations relating to patents in the fields of pharmacy and medicine in this country. The chairman stressed that he was speaking mainly about chemical patents, which differed in some respects from the generality of patents dealt with in the text-books. Mr. Treves Brown continued:—

"The first patent was granted in 1449 for making coloured glass for the

"The first patent was granted in 1449 for making coloured glass for the windows of Eton and King's Colleges. Addresses on patents, however, usually began with the Statute of Monopolies, 1624, which is regarded as marking the origin of the patent system in this country and throughout the world.

#### To Encourage New Industries

The object of the Statute of Monopolies was to prevent James I from filling the royal coffers at the expense of the public by the sale of monopoly rights. Its general effect was to render void all grants of monopolies for the making or selling of anything. But by Section 6 of the quaintly worded statute an exception was made of "letters patent and grants of privilege of the sole working or making of any manner of new manufactures... to the true and first inventor or inventors of such manufactures, which others at the time of making such letters patent and grants shall not use, so as also they may be not contrary to the law or mischievous to the State by raising prices of commodities at home or hurt of trade, or generally inconvenient." This exception was intended to encourage the introduction of new industries into the country, and the encouragement of new manufacturing activities is still the object of a patent system. Section 6 of the Statute of Monopolies remains in force today, and it is of the utmost importance, for a patent is granted only for an "invention," which is defined in the current Act, the Patents Act, 1949, as "any manner of new manufacture... within section six of the Statute of Monopolies and any new method or process of testing applicable to the improvement or control of manufacture." A method of testing was not patentable before 1949 and little use has so far been made of the provision in the pharmaceutical industry.



Mr. H. Treves Brown, B.Sc., F.P.S. (Conference chairman)

Apart from the new provision relating to testing, the first requirement for an invention to be patentable is that it shall be for a manner, or kind, of manufacture. Secondly, it must be a manner of new manufacture; in technical language, the invention must have novelty, by which is meant that it must not be known. The third requirement is that there shall have been an inventive step—a patent must have what in technical language is called subject matter. Finally, it must have utility—it must be useful.

Although at the time of the Statute of Monopolies the kinds of new manufacture that were contemplated were new industries, the term now includes a manufacturing process and also the product of a process. It must be emphasised that not every discovery, even when it is useful, is patentable, and a great deal of discussion has taken place in the courts and elsewhere to determine what is "a manner of manufacture." The discovery must relate to something tangible—in one case it was said that the invention must be concerned with a "vendable product," and although this is not the whole truth and has been modified by later decisions, it is probably as near as one can get in a simple explanation.

The second requirement for patentability, that the invention shall have "novelty," means that, at the date when the patent application, which includes a description of the invention, is filed at the Patent Office it must not be known, nor must it have been used, in this country. A problem arising from that requirement of the law is the need to restrain research workers from publishing their results before the appropriate patent application has been filed.

In most countries the Patent Office conducts a search of the literature to see if the invention has been described previously, but the thoroughness of that search for "anticipation" varies considerably in different countries. The British search is less extensive than some and a curious provision of our law is that a disclosure in a patent specification, whether British or foreign, which is more than fifty years old does not destroy novelty, although it might serve as supporting evidence of prior use.

#### Methods of Search

The U.S. Patent Office is experimenting with electronic means of recording and searching the literature. At present that "Mechanised Division" is concerned only with steroids, and it seems to be handling what must be a difficult field with speed and efficiency. The British Comptroller-General of Patents has expressed the view that the means of searching that are available to examiners in the Patent Office are so highly developed that any mechanical or electronic alternative "will have to present considerable advantages in speed and cost to make its adoption worthwhile." I suspect that many firms would prefer the speediest procedure even if the cost were somewhat higher.

The third requirement for patentability is that there shall be subject matter, or an "inventive step." The invention must not be obvious. The degree of inventiveness required to support a patent is very small; a mere "scintilla" of invention is sufficient. The question as to whether an alleged invention is obvious is often one of great difficulty, for many admirable inventions seem obvious when once they have been made. Commercial success and supplying a long-felt want are among the criteria considered.

among the criteria considered.

This question of an inventive step acquires a different significance when applied to chemical inventions such as those with which the pharmaceutical industry is concerned, for it is rare for a new chemical process to be involved. Most chemical process patents are concerned with the manufacture of a new compound or group of compounds by procedures well known in themselves—for example a Grignard reaction or the oxidation of an alcohol to an aldehyde—although not hitherto applied to the manufacture of the particular new compounds. In such cases it might be argued that there is no invention in applying procedures which would be obvious to any chemist desiring to make

the new compound. In chemical process cases the real inventive step is often the discovery of the value of the products.

#### What is "Utility"?

It follows that in chemical patents the question of subject matter is often inextricably bound up with the question of "utility"—the fourth requirement for patentability. An invention can be the subject of a valid patent only if it is useful and two aspects are involved. The procedure described must be useful in the sense of producing the result stated by the inventor, and that result itself must be useful in the sense of giving some advantage to the public. Lack of utility is one of the grounds on which the court can revoke a British natent.

If then a patentable invention has been made, a description of it has to be filed at the Patent Office. The description is known as the "specification" and in the United Kingdom and other, mainly Commonwealth, countries which follow British practice the specification usually filed with the application when it is first filed is known as a "provisional" specification. The only legal requirements about a provisional specification are that it shall describe the invention and begin with a title indicating the subject matter. At a later date a complete specification must be filed within a year of the filing of the provisional although by paying additional fees an extension of up to a further three months can be obtained. The general theory behind this two-specification practice is that in the provisional the inventor discloses the general features of his invention and early experimental results, and then he has a period of several months to work on it so that in the complete he can disclose the full details and indicate the exact scope of the monopoly claimed. His priority runs from the date of filing the provisional so far as it describes the invention.

I understand that those with wide experience of patents in various fields do not accept the view that chemical cases present greater difficulties than others in regard to the scope of the provisional specification. Be that as it may, the problem in practice is often one of the greatest difficulty. The research team make a few compounds of a group and biological investigation shows that each of the compounds has significant activity of the same type. It is obviously desirable to file a patent application immediately. But should be covered in the specificationall the compounds in the group, only those actually shown to have activity, or some intermediate selection such as those which seem fairly easy or cheap to manufacture?

The only safe procedure seems to be to make and test as wide a range of compounds as possible before filing the application so that it can be based on ascertained facts, or else to file a succession of applications as the biological results are obtained. Commercially, the delay entailed by either procedure may mean that someone else gets in first and you lose your patent and much of the financial benefit of your research. It seems to emerge clearly from this that

the larger the research team, and the greater the speed with which the ramifications of a chemical invention can be followed up, the greater the prospect of obtaining broad and valid patent cover. But anyone familiar with the problems of getting clinical trials carried out on the products of industrial research will know that a year in which to determine the scope of a patent, so as to be able to claim all—and only—the useful compounds, is hopelessly inadequate.

A British inventor who has filed an application and a provisional specification in the United Kingdom can apply for a corresponding patent in any country that has adopted the International Convention for the Protection of Industrial Property—known as a "convention country"—within one year of his United Kingdom application, and still gain priority from the U.K. filing date.

Although applications filed overseas in accordance with the Convention can claim such priority in all other respects such applications are subject to the same law and practice as apply to an original application in the country concerned, which often differ from British.

#### A Problem of Date

Whereas in most countries the priority date is that on which the application is filed, the date in U.S.A. is that on which the invention was discovered or thought of by the inventor—the "date of conception." The inventor can even publish his invention but still get a valid patent if his application is filed within a year of such publication, although he will not be able to obtain a valid patent in any country outside U.S.A. where the publication becomes available before the U.S. filing date. The determination of priority by reference to date of conception obviously creates a difficulty when two or more inventors file applications covering the same ground, for the Patent Office examiner cannot know which inventor had the earliest date of conception. In such instances the procedure by which the applicant with the earlier date of conception is ascertained is known as an "interference," the inquiry being conducted by a Board of Patent Interferences consisting of three examiners of interferences. This is an expensive and lengthy procedure and a large pro-portion of interferences, especially in the pharmaceutical industry, are settled by negotiation between the parties. In Canada, where a modification of that interference procedure is in force the convention application from overseas is not restricted to the convention date, and proof of "reduction to practice" is not required. The Board of Patent Interferences decides the issue on the basis of an affidavit the applicant files.

Another matter on which difficultics arise in prosecuting overseas applications is that of utility. In a British patent the extent of the usefulness can be quite small. In some countries, this question of utility is of the utmost importance, especially in America, where, in connection with chemical patents in the pharmaceutical industry, it has been the subject of much controversy in recent years.

The question of utility in connection with applications in U.S.A. arises in a

particularly troublesome form in connection with patents for intermediates. Until after the war, a statement that a compound was useful in organic synthesis was sufficient. Then it became necessary to indicate the compound which it was proposed to make from the intermediate, and that compound had to be of known value or its value had to be shown in the specification. The objection to that from the manufacturer's point of view was that it necessitated making further progress in a research project—in fact, making a second invention—before protection could be obtained for the intermediate.

#### A Decision that Helps

However, about a year ago the Court of Customs and Patent Appeals gave a decision which, if it is accepted as representing the law, makes the position in regard to patents for intermediates much more satisfactory. The case was concerned with claims for two derivatives of 14-hydroxy-△5-androstene. The specification referred to the presence of a 14-hydroxy group in the cardiac glycosides and said that the compounds claimed in the patent were valuable intermediates in the preparation of analogous 14-hydroxy steroids into which they could be converted by hydrogenation. The application was rejected by the Patent Office on the ground that the specification failed to show how those intermediates could be converted into useful compounds. The rejection was upheld by the Board of Appeals but the C.C.P.A. by a majority allowed the application and said the Office had been confusing the need for "utility with the separate legal requirement that the specification should indicate the manner of using the invention.

As the law stands at the moment in U.S.A. a patent for an intermediate cannot be rejected for lack of utility merely because the compounds are not themselves of therapeutic value. It is however necessary in the specification to indicate how the new compounds may be used to give compounds which are, or may be, of value, though, it may be, merely as intermediates for yet other compounds. It is a further effect of that case that the Patent Office is supported in requiring proof of clinical effectiveness in any case where the examiner thinks there is a doubt.

In the U.K. a list of applicants and the titles of the applications is published weekly and, in order to avoid disclosure of the direction of one's research, it is usual to give as vague a title as possible when filing the original application—such as "Improvements in or relating to organic compounds." The Patent Office in due course requests something more specific but that is not published before acceptance.

Eventually, if all the objections are overcome, the applicant is notified that his application is accepted by the Office and that the specification will be published. Three months then elapse during which the grant of a patent can be opposed.

The length of time during which an application is being considered is of course dependent on the time taken to reply to objections raised by the examiner. The specification is required to

be in order for acceptance within threeand-a-half years of filing the complete specification, subject to a maximum extension of three months on paying the appropriate fee. Failure to comply entails rejection of the application. Damages for infringement can be obtained only from the date on which the specification is published and the marketing of the product before that date may result in competition from imitators who are quick off the mark. greater the usefulness of the product and the easier it is to make, the more likely it is that such competition will occur. Subject to the possibility of obtaining a licence under the patent, a matter which is dealt with later, legal action can be taken against the competitor to force him to withdraw the imitation when the patent is granted, but in the meantime the patentee may suffer considerable damage for which he has no redress. In America it is possible to secure early consideration of an application in certain circumstances, such as where an infringement is occurring or the absence of a patent hinders commercial negotiations for exploitation of the invention. This seems to be a precedent which might with advantage be adopted in this country.

The average time for a patent to go through the Patent Office, from the date of filing the provisional specification to the date on which the patent was granted, is nearly two-and-a-half years, at an average cost—in the United Kingdom only—of nearly £80.

From the chemical and pharmaceutical point of view the outstanding change made by the 1949 Act was the introduction—or rather reintroduction—of "product" patents, as a result of which patents became obtainable for two kinds of product, previously unpatentable.

#### Important Prohibition Removed

Perhaps the most important prohibition removed was that on the right to obtain a patent for a new chemical compound as such, as distinct from a compound when made by a particular patented process. In America product patents have always been obtainable, and some Commonwealth countries have followed the current British Act, but most countries in Europe still limit the scope of their patent protection to chemical processes. The desirability of product patents for chemical substances is a matter for endless argument. If it be considered that patents in the chemical field are beneficial as facilitating and stimulating research then the better protection afforded by a patent for a substance made by a specific method must be regarded as desirable.

The second restriction on the grant of product patents, which was removed by the 1949 Act, was that relating to substances intended for food or medicine. In patents for new chemical compounds of therapeutic value it is now a common practice also to include a claim to pharmaceutical compositions incorporating the new compound which, it is submitted, would not have been allowable before 1949 as being substances intended for medicine. The following is an example:

"A therapeutic composition having prolonged adrenal cortical hormone-like activity compris-

ing a sterile solution of 17-hydroxy-corticosterone,  $21-\beta$ -cyclopentylpropionate in a nontoxic fluid vehicle."

A further advantage of this change in the law is that it is now possible to obtain here, as in U.S.A., a patent for a therapeutic composition based on the discovery that a known chemical compound has a valuable therapeutic action which was previously unsuspected. Patents are, however, still refused if the invention claimed is a mere mixture of known ingredients. A claim to a new substance does not extend to the substance when found in nature.

The wording of letters patent indicates that the grant confers on the patentee the sole right to "make, use, exercise and vend" the invention. *The Times* has suggested that a patent is "sometimes cynically described as a passport to litigation in the courts," for the inventor must himself enforce his right, and the practical effect of the grant is only to entitle him to take legal action to restrain anyone who is making, using, exercising or selling his invention without permission. In recent months I have come across more than one pharmacist who is under the impression that if a substance or preparation which is the subject of a patent is included in the B.P. or B.P.C., the patent can be ignored. That impression is completely without foundation and I may remind you of the "Notice Concerning Pat-ents" in the B.P. which states that the inclusion of such products "neither conveys, nor implies, licence to manufacture."

#### **Duration of Patents**

The right conferred by a British patent continues for a period of 16 years from the date of filing the complete specification, provided that the requisite annual renewal fees are paid. A period of four years from that filing date is allowed before any renewal fees are due and thus the patentee has a little time within which to decide whether it is worthwhile maintaining the patent. The renewal fee payable before the end of the fourth year is £5, and thereafter it increases each year up to £20 for the final year. In America there are no renewal fees and the patent continues in force for 17 years. Canada, as in many other patent matters, follows the American practice, but most countries require that renewal fees be paid if the patent is to remain in force.

In the United Kingdom only half the normal renewal fee is payable if the patent is, at the request of the patentee endorsed "licence of right," which means that anyone may obtain a licence to use the patent on terms which, if not agreed between the patentee and the licensee, will be fixed by the Comptroller. Little use seems made of provision in the pharmaceutical industry.

The patentee who brings an infringement action must prove infringement and where a process is involved proof is often difficult, since it is necessary to show what is being done in the alleged infringer's factory. In the case of an imported substance proof of infringement of a process patent is virtually impossible—another reason why product patents give more adequate protection.

If a patentee does not wish to keep for himself the exclusive right to exploit his invention he may either assign it to someone else or license one or more other people to exploit it on whatever terms as to remuneration and other matters are mutually agreed. He may, for example, specify the price at which the licensee may sell the product, and a licence agreement is not required to be registered under the Restrictive Trade Practices Act, 1956, if the restrictions which would otherwise necessitate registration relate only to the invention or articles made by the invention. One kind of condition is not permitted in a patent licence, namely what is called a "tieing clause," that is, a requirement that the licensee shall purchase other goods, not covered by the patent, from a specified person.

#### Rights of Licensees

As the patentee has the sole right to use and sell his invention, those who purchase the patented product from him, and any subsequent possessors, are deemed to have acquired a licence, so that they are able to use and sell it as they please. The patentee can attach conditions to the sale, and these conditions are binding on subsequent pur-chasers if they acquire the patented article with knowledge of the conditions. The subsequent purchasers are said to have a "limited licence" and those of you who are in retail practice will no doubt recall having seen notices on patented articles on your shelves indicating that they are sold under a limited licence and subject to specified conditions. The commonest of such conditions is that the article shall not be sold below a specified price. If you sell such an article in breach of the condition you are no longer protected by your limited licence; such sale is an infringement of the patent.

In this country it is not an infringement to sell an unpatented article knowing it is going to be used for a purpose which is the subject of a patent. Suppose, for example, there is a patent covering an agricultural spray based on substance X, X itself not be-ing the subject of a patent. No infringement action can be brought against anyone selling X with instructions for using it to make the spray. The farmer who uses it as instructed is infringing the patent, but it is obviously impracticable for the patentee to enforce his rights against a large number of individuals. A hospital pharmacist who manufactures a patented tablet may unwittingly be sheltering under the same umbrella. In America the person who sells a product, knowing that it is specially made or adapted for use for a patented purpose, is liable as what is called a "contributory infringer." The doctrine of contributory infringement might with advantage be incorporated in British patent law.

Complaints are often made of the cost of patent litigation, usually on the ground that it prevents a relatively poor individual inventor from enforcing his rights against a large company that he believes to be infringing his patent. It seems that however unfortunate that situation may be, it is inevitable. One rather curious alleged protection for

the "small man" is that it is actionable to threaten anyone with proceedings for infringement although it is permissible to draw attention to the existence to a patent.

#### Protection Against Abuse

The law attempts to give some protection against abuse of a patent monopoly. It consists in giving the Comptroller authority to grant compulsory licences or to mark patents "Licence of Right" if he is satisfied that abuse occurs. In accordance with an international agreement the patentee is given three years after his patent is granted before anyone can apply to the Comptroller. The kinds of abuse which can form the basis of an application are specified in the Act, which specifies that the patentee shall receive reasonable remuneration having regard to the nature of the invention.

As indicated a compulsory licence under any patent can be obtained when "a demand for the patented article in the United Kingdom is not being met on reasonable terms." It is no doubt difficult to decide what is "reasonable" in regard to prices, but even if a Court adopted what a patentee would regard as a more liberal attitude than that taken by a politician concerned with the cost of the National Health Service, the public would seem to be

adequately protected.

Although the compulsory licensing provision for medicines has been part of British patent law for forty years, it has been invoked on only two occasions, apart from one case where an applicant intended merely to import a food ingredient covered by a patent, and on appeal from the Comptroller's decision the application was refused. In the first case, the product concerned was vitamin  $B_1$  and a licence was granted with a royalty of  $7\frac{1}{2}$  per cent. of the net invoice price. In the second, which concerned chloramphenicol, the Comptroller invited the parties to make an agreed suggestion as to what the royalty should be.

A variety of reasons have been advanced to explain why the section has not been used more frequently.

As I am in what is I think the unique position of having been concerned in both the compulsory licence applica-tions that have been made I think I can suggest that while a licensee's ability to use the established trade mark is one of the difficulties which must necessarily be taken into account it is merely one aspect of a much broader commercial problem. The question that must be answered before a decision is reached as to whether to apply for a licence is simply, "Can the product be made and sold profitably?" A licence will not bring any "know-how." That has to be acquired the hard way and it is impossible to foresee the time it will take. Even if cost estimates look promising when compared with the patentees' existing selling prices, an allowance of unknown magnitude must be made for price reduction. But the prospective applicant's real problem arises from the fact that the licence will be effective only in the United Kingdom. The patentee will be supplying the requirements of this country from a

plant which will be large enough to supply the requirements of several other countries as well, and he will have therefore the great advantage in production costs that goes with large-scale manufacture. The licensee must be able to compete after paying a royalty and in spite of the fact that he can make the product only on the scale required to supply a part of the United Kingdom market. In the absence of special circumstances a manufacturer will prefer to devote his energies to the development of his own products which he can sell in all his markets at home and overseas.

#### Italy's "Distinction"

Italy has the unique distinction among the larger manufacturing countries of the Western world of not allowing patents for medicines. The absence of patents for medicines has made it possible for the Italian pharmaceutical industry to make a number of important drugs evolved in industrial research laboratories in other countries. doubt the ability to make these compounds without incurring the cost of research has played a significant part in re-establishing the Italian industry since the war. The apparent paradox that in Italy industry has been helped by the absence of patents, whereas normally industry is helped by the grant of patents, is of course explained by the fact that Italy is the odd man out. An Italian manufacturer can make and sell products which are patented in other countries not only in Italy but also in territories where the inventor has not sought patent protection and even in countries where patent applications are pending, although he may have to withdraw from the market when the patent is granted. At the same time, in countries other than his own, he can enjoy the benefits of patent protection for his own inventions. The absence of patents for medicines in Italy has been the subject of numerous commercial and diplomatic representations from many countries, especially America and Switzerland, but so far without success. It is to be expected that the position will change when the Italian industry is sufficiently well established to originate new products and wishes to protect them at home as well as in foreign countries. Another situation can occur that may lead the Italian pharmaceutical industry to accept the reintroduction of patents for medicines. That is where a firm enters into an agreement on a royalty basis to make the product of a foreign inventor who provides the requisite knowhow and then another firm works out how to make the product. Not having to pay royalty the latter can compete successfully with the licensee. If and when Italy does take patents for medicines into her system it is probable that the fear of being dependent on foreign sources for essential medicines will lead to the adoption of compulsory licensing and if that is done the British industry at least, will not be in a position to complain.

In France, patents have been obtainable for processes for manufacturing medical products, except when the product was identifiable only by reference

to the process, so that the grant of a patent for the process would have given the patentee a monopoly of the product. Apart from that, a partial monopoly of a new medicinal substance has been possible by means of the visa system, but product patents for pharmaceutical compositions and medicines were for-bidden as long ago as 1844. That posi-tion was altered by an ordinance pub-lished last February which rescinded the prohibition of product patents in the medical field, although procedural de-tails have yet to be announced.

In continental countries in general, chemical processes can be patented but not the products, and chemicals having therapeutic properties are treated in the same way as others. In most South American countries new chemical compounds can be patented as well as the processes of making them, but a distinction is made in the processes. tinction is made in the case of medi-cines so that only the processes of mak-

ing them can be protected.

In Canada, substances made by chemical processes and intended for food or medicine cannot be claimed as such, except when prepared by the method described in the patent specification, but there is no bar on patents for therapeutic compositions not made by chemical processes. While, therefore, one cannot obtain a patent for a new drug itself however made, one can patent a pharmaceutical preparation of the drug and thus obtain virtually all the protection that would be given by a patent on the drug.

#### American "Full Logic"

In America, as perhaps one would expect, the full commercial logic of the matter is applied and a new drug or process for making it can be patented in the same way as any other chemical. There seems to be no suggestion there that the public would gain by weaken-ing the patent monopoly of a medicine by the grant of compulsory licences, neither is there any worry about abuse of monopoly by a single manufacturer —and it would certainly be difficult to demonstrate by reference to the American pharmaceutical industry that patents do not provide a stimulus to the discovery of new drugs.

Commonwealth countries have tended to follow the United Kingdom practice of providing for compulsory licences, but so far as I can ascertain the provision has not been used. In India the matter is under review and the authorities have been seeking the views of the

pharmaceutical industry.

Of 18,450 complete specifications accepted by the British Patent Office in 1958, more than 2,000 were classified as being primarily concerned with chemical processes or compounds. No figures are available to show how many of those were in the pharmaceutical field but it is certain that pharmaceu-tical manufacturers who undertake research are making considerable use of the patent system. In this highly specialised field I cannot claim any status other than that of a keenly interested amateur, but it is my hope that this review will have shed some light on a branch of law which, to a greater extent than we may realise, affects us all both as pharmacists and as citizens.



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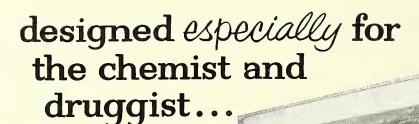
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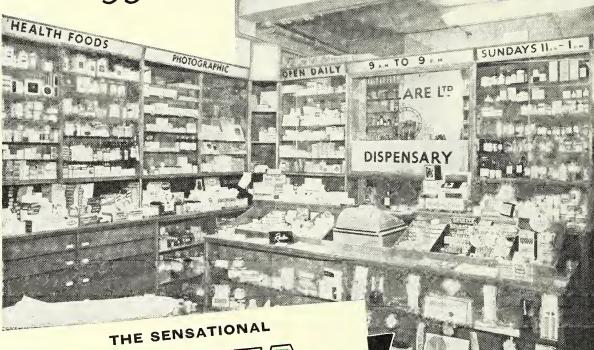


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#### BRITISH PHARMACEUTICAL CONFERENCE

#### OPENING SESSION AND SOCIAL EVENTS

A welcome from the mayor of Bournemouth



THE PLATFORM PARTY AT THE OPENING SESSION: From left: Messrs. H. G. Rolfe, H. Ridehalgh (chairman, Bournemouth Branch), Alderman L. V. Barney (mayor of Bournemouth), Messrs. G. Hughes (president of the Conference and president of the Pharmaceutical Society), H. Treves Brown (Conference chairman) and E. V. Hersant.

"MY task is a simple and pleasant one. I have to extend a welcome to you all," said Mr. G. Hughes (Conference president) at the opening session, held in the Bournemouth Pavilion ballroom on September 21. He then called upon the mayor of Bournemouth (Alderman L. V. Barney, J.P.), to address the members. The mayor said he was certain the Conference would be a happy one—not only because of the "papers you have to listen to but because of the pleasant surroundings." He had ascertained that the last Bournemouth Conference was held in 1936 and added "Where have you been all this time?" He welcomed all the members of the Conference to the town and assured them everything would be done to ensure a happy stay. He hoped the members would not leave it too long before they returned again to Bournemouth.

Mr. Hughes thanked the mayor for his welcome and for his presence at the opening of the Conference.

The president then called upon the Conference chairman to deliver his address, Mr. Treves Brown then spoke on "Patents in Pharmacy and Medicine" after which Mr. J. C. Hanbury, proposing a vote of thanks to the chairman, said that all present who had heard Mr. Treves Brown would admire his erudition and the clarity with which he had dealt with his subject. "He had dealt firmly with the neurosis of the scientists." Mr. Hanbury then referred to the ignorance displayed in certain quarters which was apparent to those who had studied Hansard. "The inventions of today must be made to pay their way or they will not be made at all—or made in countries where the return is greater." In seconding the proposal, Professor A. D. Macdonald referred to the work that Mr. Treves Brown had done in the development of the British Pharmaceutical Conference and his work in connection with the British Pharmaceutical Codex.

#### Monday Afternoon's Excursions

Sunshine was tempered by a cool breeze off the sea for the ladies' excursion to the Chines and Purbeck Vista on Monday afternoon. "In the spring," explained the guides, "the rhododendrons make a wonderful picture in this district, lining the roads and hedging the gardens." Much interest was displayed in the suspension bridge over the Alum Chine. The excursion slowed down to enable the visitors to see the Garden of Remembrance, constructed on the site of a house once occupied by R. L. Stevenson. The traffic lights in West Bournemouth were pointed out as the original site of the old county gates between Hampshire and Dorset. At Branksome Chine the excursion entered the Borough of Poole, and the visitors were delighted by the vista of Poole Harbour with its myriads of small boats. Tea was taken at Sandbanks and the party returned via the old town of Poole.

#### The Banquet

THE banqueting room of the pavilion presented a colourful scene as the guests entered on Tuesday evening to be received by the Conference chairman and Mrs. Treves Brown and the mayor and mayoress of Bournemouth. An innovation at conferences was the invitation to each guest to choose a half-bottle of wine from the French list and accept it with the compliments of the Conference organisers.

There were three toasts:—The Conference President (Mr. Gwilym H. Hughes) proposed "The County Borough of Bournemouth." It could claim," he said, "to be the leading conference town in Britain." None could have given a warmer welcome or offered greater facilities.

The Mayor (Alderman L. V. Barney,

J.P.) in his response, gave facts and figures to illustrate the Borough's rapid growth and continuing development.

PROFESSOR SIR CHARLES DODDS, M.V.O., M.D., F.R.C.P., D.Sc., F.R.I.C., F.R.S., proposed "The British Pharmaceutical Conference." He said he was impressed by the breadth and extent of the problems dealt with at the Conference. He thought the pharmaceutical industry should explain itself better to the public and that if it did so it would fare better.

Responding, Mr. H. Treves Brown said the Bournemouth meeting of the conference could boast a nearly record attendance, and a record number of science papers. He believed the conference was playing its full part in the development of medicine and pharmacy. "The Guests" was proposed by Dr. J. B. STENLAKE, COUNCILLOR P. G. TEMPLEMAN responding.

#### Civic Reception

At the invitation of the mayor and Corporation of Bournemouth members of the Conference were guests of the municipality, at a reception at the pavilion on Monday. They were received by the mayor and mayoress (Alderman L. V. Barney, J.P., and Mrs. Barney and by the chairman of the Conference local committee (Mr. H. Ridehalgh) and Mrs. Ridehalgh, The Conference chairman (Mr. H. Treves Brown) and Mrs. Treves Brown) and the Conference president (Mr. Gwilym H. Hughes) and Mrs. Hughes, the last to be received, joined their hosts in cavalcade to the table of honour, and the dancing was formally opened when the mayor and mayoress took the floor. Dancing continued until 1 a.m.

#### A Local Show of Drug Jars

A BULLETIN in the sheaf of Conference literature issued to each member invited them to visit a display of mortars and drug jars at the Red House museum. It is of interest that the collection is considered of sufficient interest to the lay public to warrant a place in



Above: Delegates at the opening session of the Conference on Monday morning.

Centre: A happy party which includes delegates and their ladies from Lancashire, Tyneside, and Scotland.

At foot: Injuries received in a recent car accident did not prevent Mr. J. H. Giles of Nottingham (seen with arm in sling) enjoying the dancing at Bournemouth pavilion on Monday evening. His partner is Miss Jenifer Nansom of South bourne, Bournemouth.

the permanent collection. Though not itself permanently at Christchurch, the collection is on loan for a period of years from Bournemouth Corporation. It is, in fact, the "Joseph Lucas" bequest which includes many handsome Italian miniature bronze of the period 1400 to 1600, and drug jars in Faenza, Macerata, Sicilian, Castel Durante, Deruta, Pesaro, Savona, Montelupo and Caffaggiolo majolica. The items are both attractively and informatively labelled, Latin abreviations being rendered as English titles, as endive water, syrup of violets, bay-laurel plaster and agaric pills. There are also many articles in eighteenth-century Dutch and Bristol Delft.





#### FIRST PROFESSIONAL SESSION

#### The rôle of local organisations in the profession of pharmacy

THE first professional session, held on Tuesday morning, was on "The Rôle of Local Organisations in the Profession of Pharmacy." Two papers were presented —one each by Mr. H. Steinman (a member of the Council of the Pharmaceutical Society) and Mr.

E. J. W. Cuer. MR. STEINMAN began by stating: "It has been said that the essence of any profession is personal service and personal responsibility. Further, I would say that in the pharmaceutical profession it is the individual pharmacistwhether in retail, hospital or manufac-turing—who sets the standards by which the rest of us are judged. At the outset, then, the individual must be clearly aware of his professional obligations and duties, both to colleagues and public. This sense of responsibility cannot be created by legislation—it must come from within. a natural fulfilment of purpose in practising as a pharmacist." Mr. Steinman said he considered it was of supreme importance that pharmacists should keep abreast of the times by taking an active part in their local organisations. Only in that way could the national bodies continue to

serve and flourish.

No profession had more organisations than pharmacy—the list of them

was impressive.

#### Voluntary Members—But Why?

Since 1933, membership of the Pharmaceutical Society had not been voluntary, but a legal consequence of registration as a pharmacist. Even before 1933, the majority of pharmacists decided that there were advantages in joining the Society—in fact, some 16,000 out of 23,000 at that time were voluntary members. Today, many pharmacists voluntarily decided to become members of other organisations also. About 80 per cent, of all hospital pharmacists were members of the Guild, and 98 per cent. of proprietor pharmacists were members of the National Pharmaceutical Union. "Why do they join these voluntary organisations? Presumably, because they are offered a service, or, maybe, an extra service that cannot be obtained elsewhere. More likely than not, the reason for joining is because the organisation represents the particular interests of a member or group of members, and because it is regarded not only as the guardian of these interests, but also as an official spokesman.

In Britain, we often heard pharmacists speak of the opinion of "Bloomsbury Square" or "Queen Square." This demonstrated a misconception. "In reality it is your opinion and my opinion that is being expressed by the headquarters of two pharmaceutical bodies—and it is your opinion and my opinion that are important. But, any national body had to be governed by a council or executive for the administration of its affairs. In accordance with democratic principles, the membership of the body proceeded to elect its government, which was, there-



PLATFORM AT PROFESSIONAL SESSION: Group at professional session at Bournemouth Town Hall on Tuesday morning. From left: Messrs. E. J. W. Cuer, H. Steinman (first speaker), G. Hughes (president) and E. F. Hersant.

by, given a mandate to administer the affairs of the central organisation in accordance with the wishes of, or to the general benefit of, the membership. The governing body, be it council or executive, was composed of individuals, and, in adopting democratic principles, these individuals must administer for the common benefit, and implement as far as possible and practicable the wishes of the electorate. It was, therefore, vitally important that the governing body should be able to determine quickly and conveniently the wishes of the elec-This was where organisation torate. came into its own.

Every member of the Pharmaceutical Society or of the National Pharmaceutical Union or the Guild of Public Pharmacists was eligible for membership of a local branch which represented a forum, where discussion among individuals produced collective opinion for national consideration. Without the guidance of local organisations, the governing body could neither represent nor implement the opinion of the membership. Without that guidance a national body was denied the knowledge and stimulus necessary for its own activities. "To the pharmacist who as an individual feels he has no influence on national policy, I would say: 'ence your local organisation." Influbranches are compact, friendly, and desirous of extending a warm welcome to you." Mr. Steinman found it strange that pharmacists seemed to display a restlessness which suggested there was something wrong with the conditions under which they practised. Far too often they assumed that all their troubles derived from the attitude of others towards them, and that they themselves were free from any obligations and responsibilities.

Every member of a local organisation had something to contribute to the making of a national policy. Members should think for themselves, and place their views on record. No governing body or secretariat had a monopoly in perception or mental ability. "I ask one thing: let the opinions be constructive. Let reasons be given for submitting a particular resolution; let suggestions be made as to what might be done to correct matters, and let it be made clear what the local organisation wants generally."

It was desirable that branch meetings should be held at intervals frequent enough to maintain the interests of members, for it was the active branch that served the central organisation most effectively. On the other hand, it should not hold too many meetings. They become wearisome, and were responsible for loss of interest in

branch affairs.

Mr. Steinman said "I should like to suggest that head offices of national bodies send a newsletter to each branch after monthly meetings describing the business transacted and suggesting subjects that might be discussed at branch meetings. Branch secretaries in turn should provide local members with information. I think it would help branches to arrive at decisions if they were addressed once a year by a member or an officer of the national executive. I believe, too, that every national pharmaceutical body ought to have a local organisation officer. He should be based on the central office and it should be a full-time appointment. His duties would be to assist branch secretaries in carrying out their duties, to assist branches to constitute or reconstitute themselves, to visit each branch at least once a year, to act as liaison officer between the central executive and branches in all ways possible, to organise national and area conferences, and to assist individual members in

their own personal problems. Providing the right type of person were appointed, I feel that some of the apathy among the membership would be over-Mr. Steinman suggested area come. meetings might overcome the apathy evident in some local branches. meetings could be assisted by the head office, the local branch acting as host and making the necessary arrangements. "An area meeting, as I envisage it, would enable members to meet representatives and officers of the central executive. They would get to know their own colleagues better, and be made to feel they were really members of an important national organisation, and not merely members of a small local body having, relatively, restricted views.

Mr. Steinman ended his paper: "Today, the national organisations look to the local organisations for new ideas, and for constructive criticism. They expect to receive complaints, too, when they are justified. They do not want apathy. But let each member of the Society, and of the other national and local organisations once accept his or her own personal responsibility, and indifference and apathy will soon disappear."

#### Second Paper

MR. CUER, referring to the strength of some of the earlier local organisations, cited the North of England Pharmaceutical Association; the Aberdeen Pharmaceutical Association, originally called the Aberdeen Society of Chemists and Druggists, founded in 1839; the Liverpool Chemists' Association established in 1849.

In 1842 the School of Pharmacy in Bloomsbury Square was opened and lectures were being organised by local groups in Excter, Bath, Bristol, Manchester, Newcastle, and elsewhere.

What of the present?
There were 143 branches of the Pharmaceutical Society, most of which were said to be active. That, in fact, meant that between 10 and 20 per cent. of the membership attended, probably, six meetings a year. That 10 per cent. formed what could really be termed the hard-core of the active interest of the

The remaining members, although in-

active in branch affairs, were still compulsory members of the branch, although they showed very little, or no interest in the local organisation.

"Mr. Steinman speaks of apathy except on the part of the few, and asked who is to blame and what has gone wrong? Recently a member of one of the branches, writing in THE CHEMIST AND DRUGGIST, asked: 'What is apathy?' It might be worth while to attempt to answer this question. One dictionary states that apathy means (1) lack of feeling (2) lack of interest or desire for activity (3) indifference. This lack of interest is very understandable. Some members live pharmacy to the exclusion of all other interests, but their numbers are few, the majority have one or more interests completely outside pharmacy.

As with other democratic forms of Government there must be a central organisation to co-ordinate the activities of and to co-operate with the local organisations. The composition of that central organisation could only be by election, and the elected members had a clear mandate to use their judgement for the wellbeing of pharmacy as a whole. To ensure that the most suitable persons were elected to the central organisation should be one of the main interests of the local organisation. No member could possibly know the personal history or the abilities of the candidates for election each year. The details and personal history and abilities should be discussed by the members of the local branch and the candidates voted for accordingly.

In the recent election over 27,000 voting papers were sent out and about 8,800 returned. The proportion returned was good when compared with the election returns in other professional organisations, but it was not good enough. Democracy worked better when a majority of the members took the trouble to make their opinions known.

With an active branch secretary and an active executive it was usually possible to increase the activity of the members, but frequently it was found that members tended to lose interest unless they were assured that the headquarters organisation was solidly behind the branch. "I have heard it said that the members of the central organ-

isation do not get down to earth, but have their heads in the clouds, and that the central organisation has a complete lack of sense of humour. This suggests that 17 Bloomsbury Square is practically unapproachable—is this so? My personal experience is No, the fault probably lies with the branch which may not be functioning properly with a consequent lack of co-operation be-tween the central and local organisa-Show an interest in H.Q. and they will show an interest in you. How many members within reasonable distance of London go to an evening meetings? I know pharmacists who go 60 miles to attend an evening meeting of the Society and return the same night, after having had a most enjoyable and usually instructive evening.

#### Rôle of the Branches

The rôle of the branch should be to attract all persons interested in pharmacy, that was, not only pharmacists but their assistants, and to arrange a programme that catered for all sections of the profession-retail, hospital, whole-

sale, and, he hoped, the representative.
"I have heard the opinion expressed many times by hospital pharmacists that the activities of the local branch do not interest him or her because they centre on the retail side. Look through your recent programmes and see if this applies to your branch. If it does it probably means that the branch has lost an active member who would otherwise enjoy the opportunity of meeting fellow pharmacists. It is very rarely that hospital pharmacists attend the social functions of the local branch—is this because of lack of interest? Or is it because the hospital pharmacist is less well paid? These considerations should be taken into account when arranging local social functions."

The branches with schools of pharmacy in their area had a special responsibility to attract the interest of the students. "In the average branch, does the secretary really appreciate what help and services are obtaining from H.Q.? Does he know what to ask for and has he sufficient confidence in H.Q. to hope that he will get what he asks for ? This is where co-operation comes in once again. The headquarters organisation must publicise any available facilities and the branch secretary must be cognisant of these facilities and be prepared to take advantage of them.'

In some areas, usually the more populous ones, branches of other pharmaceutical organisations existed and advantage should be taken to foster a more active interest in pharmaceutical matters by arranging joint meetings, say, each year. Again such a meeting could only be successful if the speaker's subject or the programmes as a whole provided an interest for every pharmacist present and not only for one section. A very common mistake was to make this kind of meeting too formal.

A further help towards success was for each organisation to act, in turn, as the host for the evening.

The local branch could play its part in

local civic activities. Local pharmacists should be encouraged to serve in local government. Membership of the local



Delegates at the professional session.

council enhanced not only the status of pharmacy as a profession, but also the professional activities of the pharmacist could be better appreciated.

cist could be better appreciated.

"This is an age of shirked responsibility—an age of dependence on others—an outlook which is fostered by the State, which in theory accepts responsibility for everyone from the cradle to the grave. The State is the sole employer in one sphere of pharmacy, and the largest customer in another. This situation requires leaders and stalwarts in our profession to negotiate terms and conditions to which our profession is entitled, and which in many cases are sadly lacking.

Local organisations can, and should, do much to arouse interest locally and foster suitable members to carry on the work initiated in the past and carried on by present leaders, and thus ensure that the profession of pharmacy can speak with a united voice."

#### More From Mr. Steinman

Mr. Steinman went on to amplify his prepared address. "Over the past few months," he said, "we have heard much of the appointment of a public relations officer and/or a Publicity Committee, the impression being that by some magical twist their introduction would immediately result in a better appreciation, by others, of the pharmacist and his calling. That there is a proper place for publicity none would deny, but I prefer to believe that we already have a potential of some 27,000-odd public relations officers on the Register of the Society. Every pharmacist is an ambassador for his profession, and can exert a powerful influence for good in his daily contacts if only he will recognise his opportunities for so doing." He was "a believer in the dignity and power of the individual," and was convinced that the most vital factor in that matter of organisation, whether local or national, was the exercise by the pharmacist of his professional responsi-bility. "In fact he is a local organisation in himself, because he has so many responsible decisions to make for himself.'

That responsibility could not be procured either by legislation or examination. It must come from within: a natural fulfilment of purpose and pride from practising as a pharmacist, and perhaps the seeds of that pride could first be sown in the teaching colleges.

It was easy to conform to the general pattern and the desire for material gain, but it took courage and personal responsibility to make the right kind of professional decision at the right time. "For instance, in retail practice, it is your personal decision that makes you determined to see that your pharmacy both internally and externally reflects the professional nature and true character of your calling. It is your personal determination to follow policy leads from central organisation that means success or failure in the long The decision, when is it more important not to meet the public request for particular drugs, is yours and yours alone, in association with advice and guidance already offered to you.'

Every professional person owed



Early arrivals at the pavilion on Sunday afternoon were Mr. and Mrs. Hugh Campbell, Ballymoney, Northern Ireland, Mr. Campbell is president of Northern Ireland Pharmaceutical Society. On left is Miss Angela Ridehalgh, daughter of the chairman of the Bournemouth Branch of the Pharmaceutical Society.

something to his central and local organisations and Mr. Steinman believed it to be part of the pharmacist's professional duty to attend his local branch meetings where a warm welcome awaited him. No profession was more closely organised than pharmacy But to function successfully and effectively an active system of branch organisation was essential. "What is it that makes branch organisation so desirable as to make it almost inevitable? It is the need for dissemination of information at local level with particular reference to matters of policy: the need to provide a forum on which matters of policy can be brought under virile discussion; the need to provide a two-way exchange of views."

Just as it was impossible for a central body to promote its policies effectively by direct contact with individual members, so it would be impossible for the central body to learn those matters about which its members were thinking, about action taken, or not taken, or as to action which members would like to be taken. It would be completely unrealistic if no Branch organisation existed, and if it were merely a case of relying on what the individual said or wrote to his central office.

Local organisation was where discussion among individuals produced collective opinion for national consideration. To the pharmacist who as an individual thought he had no influence on national policy, the answer was to influence his local organisation. There was the forum. There he could express his opinion. The test of individual opinion was could it influence the opinion of local organisation? If it could then it was likely to influence national opinion.

The duties of a central body to its branches were to provide the means of functioning. They were: a formal constitution on which recognition as a local forum for a two-way interchange of opinion could be based, and the necessary finance to enable it to function effectively; to provide clear statements of central policy or intended policy with arguments for the case—what was being done and what it was proposed to do; the opportunity to discuss such policies in the knowledge that account of local action would be noted; the means for interchange of branch opinion at national level.

"In so far as finance is concerned I believe it to be an error of the greatest magnitude to so finance a branch that initiative and self-help become completely unnecessary. It destroys inde-

pendence."

But it was the height of folly to regard branches as a necessary evil and as doing nothing more than to enable a central body to say it had taken steps to make its policies known at local level. "Branch organisation must be taken seriously, and if as a branch, you need more information then insist upon having it, either verbally by a speaker or in written form if that will do. Without the means for interchange of branch opinion at national level branch organisation cannot or will not serve its proper functions which are of determining, by hammering out on an anvil of debate, an agreed national opinion on important matters of policy, or of enabling progressive local opinion to canvass that opinion within the profession. What is regarded as ultra progressive in one year, may well become widely accepted policy in a later year. The classic example of that was the motion from the Tees-Side Branch some years ago. Its proposals even-tually developed into the 'Code of Ethics'."

Poor attendance at local meetings was a problem. Official speakers could spend one or two days of travelling time to address a poorly attended meeting. That was not encouraging to the speaker, and was heartbreaking to

local officials. Would area meetings be an improvement?

Over the past few years a new factor had arisen with which pharmacists must be much concerned: the intrusion of the State into pharmaceutical affairs. The hospital pharmacist had one employer, the State; the A.B.P.I. had its own contacts and problems with the State and so, too, had the pharmacist in retail practice. Somehow or other, the central bodies seemed to be in continual negotiation with the State's representatives. For the central organisation to be strong in negotiation, it must have the maximum support from its members. The State had a perfect right to protect the interests of the public. "Your representatives are commissioned to protect your interests; but their strength is dependent upon you, and your local organisation.

Was it impossible to achieve some unity of purpose for pharmacists' general welfare? From the individual pharmacist, through the local organisation, and on to the central organisation? "I say it is not impossible of achievement provided each and every one of us will accept his own responsibility in our profession of pharmacy."

#### The Converted

Before commenting on his paper, MR. CUER said that he was preaching to the converted. "We want here the people who do not attend branch meetings." In the days of the Aberdeen Pharmaceutical Association they could fix hours but today members of the profession could not even deal with rota-breakers. Referring to low attendance at branch meetings he spoke of the menace of television. As Mr-Steinman had said it was a great disappointment to branch officials to arrange an interesting programme for all members of a branch and have only a loyal 10 per cent. turn up. "We do not get rid of apathy even when we have a [Pharmaceutical Society] Council election. There is not even enough interest now to get enough scrutineers.

Mr. Cuer criticised the "headquarters organisation" for not "going to the branches" [for their opinions]. "They just go ahead and do what they want. Another sore point among branch members has been the Society's educational policy. There is nothing now we can do about it but it has never been agreed to by the rank and file. Do headquarters take note of what the branches think? It makes you wonder." In concluding, Mr. Cuer said it should be obligatory for all pharmacists who had post-graduate students to take them along to the local branch meetings. "We must catch the interest of members when they are young."

#### Discussion

MR. C. C. STEVENS, Stockport, said that of course the branch organisation was the only way of making one's views heard. "But this morning's presentation is the way not to do it. With respect to Mr. Cuer we do not know who he is or anything about him. The chairman [Mr. Gwilym Hughes, president of the Pharmaceutical Society] has not told us. It is typical of the way

they run branch organisation." Mr. Stevens said that the only way to get good branch organisation was for the branch chairman and secretary to "work their guts out." Retail pharmacists were now making a good living and even hospital pharmacists had enough to live on. To encourage such people to attend meetings "do not hold your meetings in a dingy hall, with a cheap cup of coffee and an indigestible biscuit. Hold meetings in pleasant surroundings, as bright and cheerful as possible." That was the secretary's task. The chairman should keep the meeting in order and should meet the speaker to see that he was not left to wander round the town. Until branch secretaries and chairmen did their jobs properly "we shall get nowhere."

THE CHAIRMAN then explained that he had not introduced Mr. Cuer as he had taken it for granted that he would be known to those present. Mr. Cuer then gave some details of his background.

MR. M. P. EARLES, Dartford, said that it had recently been suggested that students should be helped to attend the British Pharmaceutical Conference. That had been put on one side. He could understand the reason for that so far as graduates were concerned, but not so far as post-graduate students were concerned. He thought that it would have been a good thing if there had been more post-graduate students present then to have "digested" Mr. Steinman's "masterly address.

MR. K. HOLLAND, Romford, said "One gets the impression from Mr. Steinman that there is a public relations 'do it yourself' kit for every member." Whilst he agreed that there was a certain amount that members could do, an expertise was required when dealing with the Press, etc. Members could not help in that respect. There had to be a good deal of central direction and he liked the idea of an organisation officer. There were many branches of the Society that were not

very active. It was with those branches such an officer could stir up activity. Such an officer could, in the early days, help inexperienced branch officers by showing how the branch should be run, and in many other ways give practical help. "But so far as public relations is concerned we should have an expert person or company to help us nationally."

MR. A. E. THORPE, Manchester, said that the message that should be brought home was that the Society was every man and woman who belonged to it. The branches were the nucleus of the Society and it was from the branches that the Society "gets its life As had been mentioned pharmacists were in a prosperous position. They felt no need to worry and gave no consideration to the work that was being done for them. "It has been said that we should have brighter halls, brighter meetings, and refreshments, so that more members might come along and help us. I think the speakers have made out a good case, but as was mentioned, we are speaking to the converted and we must all of us convertwe must become missionaries. We must try to rekindle that spark of enthusiasm that led to the formation of branches in the early days. If we can get that enthusiasm we might get loyalty to the

organisation to which we belong."

MR. J. C. N. WILFORD, Thames Valley, said that some years ago he had been asked to deal with an infringement of the Society's ethical code. He had asked the Society how he should deal with it and had been told that local members should "go and remonstrate" with the code breaker. "That seemed to me to be futile. We have a system of inspectors in the Society which has the law behind it—could the inspectorate be enlarged in number and given the duties of representing pharmacy to the individual pharmacist?"

Referring to some of the comments that had been made, Mr. Steinman said that he agreed with Mr. Stevens that the secretary was the most im-



Mr. and Mrs. S. Hughan, Holmes Chapel, being received at the civic reception on Monday evening.

portant person in any branch. Of Mr. Earles' comments on post-graduate students Mr. Steinman said that he [Mr. Earles] should have known that the matter was discussed thoroughly by the Council who had decided that it was not a practical course to have such students at the Conference. Mr. Steinman repeated that the most important person in the matter of publicity "is the pharmacist himself. We do not qualify for status, we have to earn it." He did not think it would be right for the Society's inspectors to undertake any work in connection with local organisation because they had a statutory duty to perform.

The suggestion that meetings should be bright and cheerful was fully supported by MR. CUER. That was what his branch had attempted to do and their meetings were held in a room at a local public house. One of the older members welcomed any new members and someone was always detailed to meet the speaker. For that reason, he believed, the branch had a higher percentage of "hard core" loyal members than most. He did not think that postgraduate students had the basic foundation essential of anyone attending the Conference: the ability to go back to the branch and pass on any benefit that had accrued from the Conference.

#### What the Public Think ...

"Let us not cover the fact that the public thinks the best pharmacist is the one who gives them what they want," said MR. W. TALVAN REES, Cheltenham. "That is why we need a public relations officer to protect the pharmacist who realises and maintains his full professional responsibility." Mr. Rees asked if the Society had consulted the British Medical Association in any way before issuing the recent list of preparations that the Council considered should be issued on prescription only (see C. & D., August 22, p. 80). He commented "We need a professional relations officer as well as a public relations officer."

The Council's recommendation on "prescription only" drugs was also referred to by MR. E. ROBINSON, Bradford, who considered that such directives were making the membership disinterested. Members believed that they were being deprived of their "birthright" to sell, professionally, professional products to the public. "Frequently in the Press we are contaminated by propaganda and we are not getting the chance to reply. we are members of a professional body and our professional bureaucrats will not speak out on our behalf, then we must take drastic action. I can see the day when we shall receive a directive on Pharmaceutical Society notepaper saying that we are not to smoke tobacco of any kind. I ask you for greater vigour in the branches in an effort to open out greater pharmaceutical opportunities and leadership.'

MR, S. G. E. STEVENS, Croydon, asked if the branches were doing anything to help entrants into pharmacy. There were occasional careers talks on pharmacy and the Society had done a good job at the recent Careers Exhibition. But often such talks did little



Mr. and Mrs. J. Plenderleith, Shepperton (left) with Mrs. and Mr. J. B. Richie, Dundee, at coffee on Monday morning.



All set for the first ladies' excursion on Monday afternoon.

good. They needed to be aimed at the young people of sixteen and seventeen who had probably not definitely decided on their choice of career. More effort was needed to reach those young people and the branches could help in that task.

"The simple truth of the matter is that there is apathy in pharmacy because members believe nothing they do can influence policy decisions," said MR. G. T. M. DAVID, Swansea. "That may not be entirely true but there may be enough truth in it to make us wonder if we should do anything about it. We grumble about the number of people who do not vote, but need we be surprised because they do not know the candidates. The Council should restore to candidates the right to undertake some propaganda."

Mr. A. Howells, Dartford, said he was disturbed that no mention had been made of the Press. His branch thought that inadequate use was made of, in particular, the Society's journal, for the reporting of branch events. Mr. Howells went on to appeal to the Council to give further consideration to the possibility of assisting students to attend the Conference.

MR. G. J. HENDRA, Cornwall, pointed out that it was not suggested when the appointment of a professional public

relations officer was first mooted, that such an appointment would do away with the need for individual co-operation in producing the result that was desired. "That was thrown in as an argument to denigrate the proposal in the first place. The two things are complementary." Mr. Hendra went on to praise the Council of the Pharmaceutical Society "for getting ahead of some of the other bodies." It had been argued before that the Society should follow other organisations, but he believed the Society should lead in such matters as deciding that certain preparations were best supplied only on prescription. "We are the responsible body. We should have the courage to take such steps."

Mr. Steinman congratulated the secretary of the Cheltenham Branch on a letter he had sent to a newcomer into the branch area. "It was one of the most delightful letters of welcome I have ever seen," said Mr. Steinman. "and I would suggest that any branch secretaries here should sink their pride and try to get hold of a copy." Mr. Steinman then asked Mr. Talvan Rees if the Society needed to consult the British Medical Association about the list of drugs recommended for sale on prescription only. If the Council believed it right and proper to issue such

a statement there was surely no need for it to consult anybody. "Anyone who doubts that the Council was right should remember that the Council made its moves on dexamphetamine and methylpentynol long before any other body." He disagreed with the statement by Mr. Robinson that the Council's directives were making members disinterested. "And I would ask Mr. Robinson where he thinks he can find a public relations officer who can prophesy when there is going to be

adverse publicity about pharmacy...."
MR. ROBINSON: Weekly...
MR. STEINMAN: "It depends how you spell it. In reply to Mr. David I would say that the interested member can acquire all the information he wants, good, bad or indifferent, about members offering themselves for election, particularly if he attended branch meetings. Mr. Howells doubted the value of a newsletter from the branch secretary. I received from the Stirling Branch a newsletter issued by its secretary and it was very interesting. It is not impossible for other branch secretaries to follow suit. Mr. Howells also spoke about bringing students into the branch early. I agree. But we must have the co-operation of the staffs of the teaching colleges."

(To be continued)

#### SCIENCE SESSIONS

#### Divided into two sections

Section A of the Monday afternoon science session was opened at the TREVES BROWN, who called on Dr. N. J. HARPER to read the first paper.

#### Stereochemistry of Potential Analgesics

N. J. HARPER, A. H. BECKETT and A. D. J. BALON

Some compounds related to the reversed esters of pethidine and some of their esters were prepared. Treatment of N-(2'-phenylethyl)-2-methyl - 4 - piperidone (I) with lithium phenyl gave two isomeric piperidinols (A and B) which were separated by fractional crystallisation of the hydrochlorides. isomers, obtained in a ratio of 2:1, were assigned cis-CH<sub>3</sub>/C<sub>6</sub>H<sub>5</sub> and trans-CH₃/C₅H₅ configurations respectively on the basis of evidence given in the paper. The addition of lithium phenyl to isomerically impure N-(2'-phenyl-ethyl)-2:6-dimethyl-4-piperidone gave the three theoretically possible piperi-dinols in the ratio 9:2:1; they were separated by fractional crystallisation of the free base. Configurations have been The reaction of cis-2æ6assigned. dimethyl-4-piperidone with lithium phenyl gave two isomeric piperidinols which were separated chromatographically in a ratio of 12:13 respectively. In an attempt to prepare hydrobromides, isomer A gave the piperidinol salt but isomer B eliminated to the tetrahydropyridine salt. Configurations are suggested. The compounds and their esters are being tested as potential analgesics. (From the School of Pharmacy, Chelsea College of Science and Technology)

#### Discussion

DR. J. B. STENLAKE, Glasgow, congratulated the authors on "an elegant piece of chemistry." He said that part of the evaluation on which the assessment of the structure of the compounds in question was based was the infra-red frequency. What kind of shifting frequency had the authors obtained? What results and what orders of activity had been obtained in the tests of those esters as potent analgesics?

Dr. Harper replied that they had no details regarding shifting frequency. The intermolecular hydrogen bonding in isomeric A and B was definite, but not in isomer C. Some of the compounds had been shown to be fairly

active analgesics. The greatest analactive analgesics. The greatest analgesic activity was in the acid-oxyester of isomer A which had shown four times the activity of morphine. No ester had been obtained for testing from isomer C

DR. A. H. BECKETT, co-author of the paper, said the example illustrated was that of a compound in which the various types of activity exhibited by morphine had been clearly separated. Its activity was greater than that of morphine in equivalent analgesic dose.

PROFESSOR MACDONALD, Manchester, said that morphine was still a good analgesic. A primary consideration should be, not the finding of analgesics more powerful than morphine, but ones with fewer disadvantages, for instance the risk of addiction. It was good to know that the present analgesic did not produce vomiting, but what was the likelihood of addiction?

DR. HARPER said they had not been

primarily concerned with producing a more potent analgesic. They would be happy to produce one less potent than morphine if it had fewer undesirable properties. The compound discussed might be further exploited to reduce the side effects while retaining the analgesic properties.

Papers 2 and 3, which were taken together, were read by Mrs. F. STOTHERS.

#### Neuromuscular Blocking Agents

IV. N- AND S-ALKYL VARIANTS OF DIHEXASULPHONIUM AND DIHEXAZONIUM Triethiodides

D. EDWARDS, J. B. STENLAKE, FIONA MACLEOD CAREY and J. J. LEWIS THE paper deals with the synthesis and pharmacological properties of NSNand NNN-tris-onium compounds related to dihexasulphonium and dihexazonium in which N-alkyl substituents are varied. All the compounds tested qualitatively resembled tubocurarine in their action. Stepwise replacement of ethyl by methyl in dihexasulphonium tri-ethiodide is shown to decrease potency, and some decamethonium-like properties appear in some of the compounds. Potency also falls when ethyl groups are replaced successively by n-propyl in both dihexasulphonium triethiodide and dihexazonium tri-ethiodide. Potency is increased by replacement of one ethyl group by *n*-butyl at each quaternary centre of dihexazonium.

(From the School of Pharmacy, Royal College of Science and Technology, Glasgow, and Department of Materia Medica and Therapeutics, University of Glasgow)

#### Neuromuscular Blocking Agents

V. LINEAR NNNN-TETRA-ONIUM, NNSNN-PENTA-ONIUM AND
NNNNNN-HEXA-ONIUM COMPOUNDS D. EDWARDS, J. B. STENLAKE, J. J. LEWIS and FAY STOTHERS

Preliminary pharmacological observations on a series of tetra-onium compounds, the *NNSNN*-penta-ethonium compound, 7,7,14,21,21-penta-ethyl-7, 21 - diazonia - 14 - thioniaheptacosylenebis (triethylammonium) penta-iodide and the NNNNNN-hexa-ethonium compound, 7,7,14,14,21,21,28,28-octa-ethyl - 7,14,21,28 - tetra - azoniatetratriacontylenebis (triethylammonium) hexa-iodide are given in the paper. Although they are incomplete, certain trends are shown. It appears that interonium distance is more important in determining the type of activity than the overall length of the molecule and the number of onium centres it contains

(From the School of Pharmacy, The Royal College of Science and Technology, Glasgow, and the Department of Materia Medica and Therapeutics, University of Glasgow)

#### Discussion

MR. D. M. BROWN, Betchworth, asked whether the authors had considered the introduction of isopropyl groups into their compounds.

DR. J. B. STENLAKE replied that they had considered that, but they had not tried doing so to date. The difficulty with complex molecules was the likeli-

bulky groups such as isopropyl.

DR. G. F. SOMERS, Liverpool, asked what was the main purpose of the investigation? Was it merely to follow the different chemical spacial relationships, or the introduction of new curare-type drugs? If the latter, what criteria would the authors take for the introduction of those drugs?

MRS. STOTHERS replied that the aim had been mainly to investigate interspacial arrangement, but also to intro-duce drugs having the advantages but not the disadvantages of tubocurarine, more potent drugs, but having less effect on the respiration and producing relaxation without ganglion blocking.

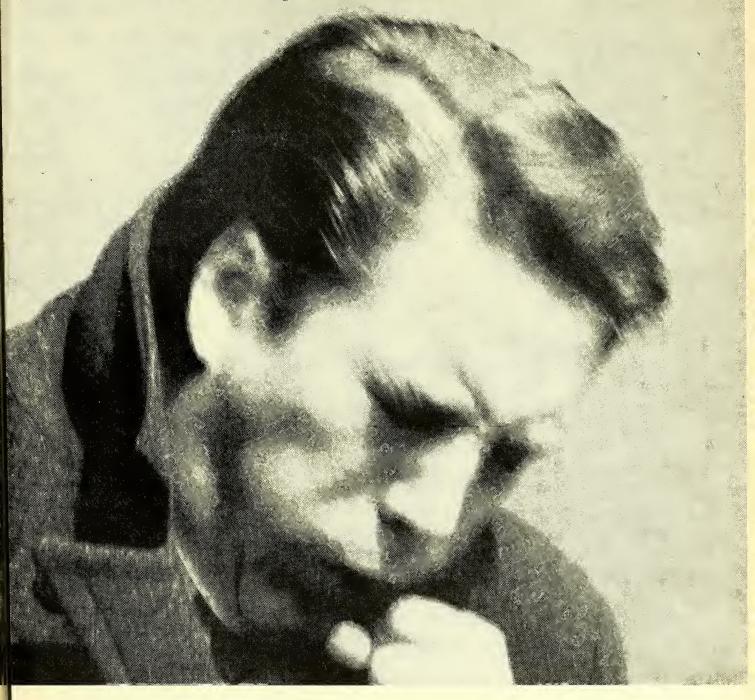
DR. J. J. LEWIS, co-author of the paper, said some of the compounds had gone to clinical trial and some had come near to the compound required. Their main interest had been to obtain information about receptor surfaces.

DR. R. E. LISTER, Edinburgh, asked which of the animal species used in the experiments had come closest to man in the sensitivity shown to those compounds?

Dr. Lewis replied that no good correlation had been obtained between laboratory and clinical investigations. The nearest animal was the cat, but even there there were divergencies. It was impossible to assess these compounds accurately until they were used clinically.

(To be continued)

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SYRUP:

Each teaspoonful (5 cc.) contains 125 mg. tetracycline HCI, Bottles of 2 fl. oz. and 16 ff. oz.

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# TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, SEPTEMBER 23: Demand for CRUDE DRUGS during the past week remained at a very low level. Shortages of many items still prevail; the position of IPECACUANHA is particularly tight with no first-hand shipment offers from Brazil, Costa Rica, Nicaragua or Colombia.

Although no business is being done in SENEGA the idea of value at origin is 19s. 6d. per lb., c.i.f. A slight adjustment occurred in the shipment rates of CINNAMON QUILLS. Chinese MENTHOL was firmer in the forward position while spot remained unobtainable. TURMERIC was 2s. 6d. per cwt. lower for shipment.

In ESSENTIAL OILS both Ceylon and Formosan CITRONELLA were slightly lower. LEMONGRASS was about threepence per lb. down on the previous week. Quotations for Chinese Pepper-MINT were nominal both on the spot and forward. SANDALWOOD was 2s. 6d. per lb. dearer both for Mysore and

East Indian.

In PHARMACEUTICAL CHEMICALS, CAF-FEINE was lower following the strong competition from imported material noted in last week's report. THEO-PHYLLINE and AMINOPHYLLINE have

also been reduced.

Statutory Instruments 1959, No. 1607, brings into effect a new list of goods temporarily exempted from import duty until October 1, 1960, and extends until that date those already exempted with a number of important exceptions, among them resorcin, oxytocin, œstra-diol, chloroquine, and 10-undecenoic acid. Items exempted until January 1, 1960, include poliomyelitis vaccine (Salk type), carbomycin, prednisolone diethylaminoacetate, sodium ascorbate and glutamic acid.

#### Pharmaceutical Chemicals

AMIDOPYRIN.—Minimum rate is 20s. 1d. per lb. with usual differentials for smalls. BENTONITE.—Offers of B.P. material are about £70 per ton as to quantity.

BENZAMINE.—16-oz. lots of LACTATE are 15s. 3d. per oz. and HYDROCHLORIDE 16s. 3d. per oz.

BISMUTH SALTS.—The following are the prices (per lb.) in largest bulk packages:-

		28 lb. to 1 cwt.		1 c	wt.	5 cwt.		
CARBONATE		s. 22	d.	s. 21	d.	s. 21	d.	
SALICYLATE		21	9	21	4	20	10	
SUBGALLATE SUBNITRATE	• • •	21 20	1	20 20	8	20 19	2	

The 1-cwt. rates (per lb.) for other salts are:—CITRATE, B.P.C., 22s. 8d.; NITRATE, crystals, 14s. 8d.; OXIDE, B.P.C., 27s. 7d.; OXYCHLORIDE, B.P., 27s. 9d.; OXYIODOGAL-LATE, B.P.C., 28s. 9d.; SODIUM TARTRATE, 35s. 6d.; and TRIBROMPHENATE, B.P.C., 26s. 9d.; 35s. 6d 26s. 9d.

CAFFEINE.—ANHYDROUS, less than 50-kilo lots, 35s. per kilo; monohydrate, b.p., 34s.; citrate, 26s. kilo.

CHINIOPHON.—B.P. 1948 is 67s. per kilo; 50-kilo lots, 62s. 6d. per kilo. The sodium derivative (B.P. 1953) is 99s. 4d. and 92s. 9d. for the same quantities.

CHLOROCRESOL.—Pharmaceutical quality is quoted at 7s. 2d. per lb. for 1-cwt. lots.

Chloroxylenol.—B.P. quality is 5s. 3d per lb. for 1-cwt. lots and 5s. 1d. for 10-cwt

CORTISONE.—(Per gm.). ACETATE, 13s. 9d. for 1-kilo lots; Hydrocortisone acetate OF ALCOHOL, 16s.

ERGOMETRINE.—For 20-gm. lots the price of the maleate, B.P., is £17 10s. per gul. and the tartrate, £16 5s. per gm.

ERGOTOXINE ETHANESULPHONATE. — Price per gm. for B.P.C. (1949) is: 1 gm., 168s. 9d.; 10 gm., 155s. 3d.

FORMALDEHYDE, - B.P. solution in 1-4drum lots is £39 15s. per ton; 5-drum lots are £38 15s. per ton.

IRON SALTS. — GLUCONATE, B.P.C., is 6s. 3d. per lb. in 1-cwt. lots; SULPHATE, B.P. crystals are 9½d. per lb. in 28-lb. lots; 1-cwt. is 57s. 6d. per cwt. and 5-cwt., 52s. 6d. per cwt.; SULPHATE EXSICCATED is 1s. 5d. per lb. for 28-lb., 1-cwt., 123s.; 5-cwt., 113s. per cwt., 1-cwt. fibre kegs free. Other packages extra. Phosphate, B.P.C., 28-lb., 3s. 6d. per lb.; 1-cwt., 3s. 3d. PHOSPHATE, SACCHARATED, B.P.C., 28-lb. lots are 3s. 9d. per lb.; 1-cwt., 3s. 6d. OXIDE, PHOSPHATE, SACCHARATED, B.P.C., 28-Ib. lots are 3s. 9d. per lb.; 1-cwt., 3s. 6d. OXIDE, RED PRECIPITATED, B.P.C., 1949, 1-cwt. 2s. 1d. per lb.; CARBONATE, SACCHARATED, B.P.C., 1949, 28-lb., 3s. 3d.; 1-cwt., 3s. AMMONIUM CITRATE, scales, 6s. 6d. per lb.; granular, 5s. 9d. AMMONIUM SULPHATE, 1-cwt., 1s. 10d. per lb. QUININE CITRATE, 2s. 1d. per oz. in 100-oz. tin.

Magnesium Carbonate.—Minimum bulk rate for LIGHT is 121s. per cwt.; HEAVY is 160s, per cwt. for 1-cwt, lots and about 130s. per cwt. for 1-ton lots.

Magnesium sulphate.—Quotations for B.P. in minimum 1-ton lots vary between £18 and £21 per ton according to size of crystal and manufacturer. £42 per ton. All ex works. Exsiccated is

Magnesium trisilicate.—In 28-lb. packages the prices (per lb.) are now as follows:—28-lb., 4s.  $9\frac{1}{2}$ d.; 1-cwt., 3s. 10d.; 5-cwt., 3s. 7d.; 1-ton, 3s. 1d.

Phenol.—Basic price for ice crystals in drums is 1s. 4½d, per lb. (under 1-ton lots, 1s. 7½d.). Detached crystals, 2d, per lb. above and Liquid, B.P., ¾d, per lb. below the foregoing prices.

SODIUM ACETATE.—B.P.C. in 28-lb. lots is 2s. 4d. per lb.; 1-cwt., 2s., and 5-cwt., 1s. 11d.

Sodium Bromate. — quoted at 9s. 9d. per 1b. BROMATE. — 1-cwt. lots are

SODIUM CARBONATE. — B.P.C. exsiccated is 70s. per cwt.; 5-cwt., 65s. per cwt.

SODIUM CHLORIDE. - Re-crystallised is 25s. per cwt. and B.P.C., 42s.

Sodium METABISULPHITE. — Granular in 1-ton lots is from £48 12s. 6d. to £53 17s. 6d. per ton according to packing.

SODIUM PERBORATE. — Prices (per ton) are £145 15s. in 1-cwt. kegs; £138 5s, in 1-cwt. bags for B.P.C. (minimum 10 per cent. available oxygen). The PERBORATE MONOHYDRATE testing 15 per cent. available oxygen is £309 15s. and TETRAHYDRATE, from £131 15s. to £139 5s. per ton as to precipe. ton as to packing.

SODIUM PERCARBONATE.—Price (per cwt.) is 170s. 9d. (bags, 7s. 6d. lower) for minimum 12½ per cent. available oxygen.

Sodium phosphate. — B.P.C. powder is 2s. 3d. per lb.

SODIUM SALICYLATE.—Rates are now:— 1-ton lots in bulk, 3s. 7d. per lb.; 5-cwt. 3s. 8d.; 1-cwt. 3s. 10d.

SODIUM SULPHATE.—Makers' prices for B.P. range from £12 10s. to £19 17s. 6d. per ton as to crystal and quantity, ex

SODIUM SULPHITE. — 1-ton lots on the SODIUM SULPHITE. — 1-ton lots on the spot of anhydrous (48–50 per cent.) are £71 10s. per ton in 1-cwt. drums or £67 5s., in 1-cwt. bags. CRYSTALS, B.P.C., are £32 15s. per ton in 1-cwt. paper-lined bags. Commercial crystals are from £27 to £28 15s, as to packing.

Sodium thiosulphate. — Makers' price for 1-ton lots of photographic grade in paper-lined bags is £38 per ton.

SULPHUR.—(Per ton in 1-ton lots), B.P. PRECIPITATE, £112 10s.; SUBLIMED, B.P. £47 10s.; POWDER, 100 mcsh, £25 10s.

Theophylline.—50-kilo lots: Alkaloid anhydrous, 34s. 6d. per kilo and B.P. 33s. 3d.; aminophylline, 33s. per kilo.

#### Alcohol

Alcohol

British Spirit per proof gall.:—
Ethyl Alcohol: (95 per cent. Gay
Lussac, 66 o.p.); where the number of
proof gall. taken over any one year ended
March 31 is 300,000 or over 4s. 0\frac{1}{3}d.;
200,000 and less than 300,000, 4s. 0\frac{1}{3}d.;
100,000 and less than 200,000, 4s. 1\frac{1}{3}d.;
50,000 and less than 100,000, 4s. 1\frac{1}{3}d.;
2,500 and less than 10,000, 4s. 2\frac{1}{3}d.;
2,500 and less than 10,000, 4s. 2\frac{1}{3}d.;
2,500 and less than 10,000, 4s. 1\frac{1}{3}d.;
2,500 and less than 10,000, 4s. 2\frac{1}{3}d.;
2,500 and less than 10,000 and less than 10,000 and less than 10,000 and less than 10,000 and less than 10, paragraph:

Absolute Alcohol, 95.5 per cent., 74.5 Absolute Alcohol, 95.5 per cent., 74.5 o.p., 3d. more per proof gall., the special high strength (99.9 per cent., 75.2 o.p.), 5d. more. Doubly Rectified Alcohol (S.V.R.) 95.8 per cent., 68 o.p., is 3d. more and P.I. Rectified Alcohol, 96.1 per cent., 68.5 o.p., 8d. more R. R. Absolute Alcohol (re-rectified, 99.7 per cent., 75 o.p.), 14s. 10d. per bulk gall. net.

Methylated Spirit

Methylated Spirit

METHYLATORS' rates per bulk gall, in Great Britain are as follows:—
Industrial Methylated spirit: Strength 61 o.p., 500 gall, and over, 5s. 11d.; 100 gall, and under 500 gall,, 6s. 2d.; 40 gall, and under 100 gall,, 6s. 5d.; 10 gall, and under 40 gall,, 6s. 10d.; 5 gall, and under 10 gall,, 7s. 3d. Strength 64 o.p., \(\frac{1}{2}\)d. per gall.; 66 o.p. (B.P.), 1d.; 68 o.p., 3\(\frac{1}{2}\)d. more than the above rates with 74 o.p., at 6s. 8\(\frac{1}{2}\)d. (6s. 11\(\frac{1}{2}\)d., 7s. 7\(\frac{1}{2}\)d. and 8s. 0\(\frac{1}{2}\)d. for gall, for similar quantities. Tank wagon delivery is 1\(\frac{1}{2}\)d. per gall. off list price—minimum, 500 gall. For industrial methylated spirit of standard toilet quality prices are from 7s. 2\(\frac{1}{2}\)d. (tank wagon) for 500 gall, to 8s. 8d. for 5-10 gall. (in drums) for 61 o.p.

Pyridinised industrial methylated spirit: Strength 66 o.p., 500 gall, and over, tank wagon delivery.

Pyridinised industrial methylated spirit: Strength 66 o.p., 500 gall. and over, tank wagon delivery, 6s. 2d.; 100 gall. and under 500 gall. (in drums), 6s. 6½d.; 40 gall. and under 100 gall., 6s. 9½d.; 10 gall. and under 40 gall., 7s. 2½d.; 5 gall. and under 10 gall., 7s. 7½d.

Miverised methylated spirit: Strength

and under 10 gall., 1s. 14d.

Minerilised methylated spirit: Strength 64 o.p. in one delivery, 100 gall. and under 500 gall., 6s. 6½d.; 40 gall. and under 100 gall., 6s. 9½d.; 10 gall. and under 40 gall., 7s. 2½d.; 5 gall and under 10 gall., 7s. 1½d.

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Methylated resin finish is 3d. per gall, over and methylated shellac finish is 1s. per gall, over the prices of pyridinised

methylated spirit.

Terms: - Deliveries free and carriage paid on returned empties; net cash.

#### Crude Drugs

ACONITE. — Spot supplies of Spanish napellus are 2s. 6d. per lb.

AGAR.—Kobe No. 1 is 11s. 6d. per lb., in bond, and for shipment, 11s., c.i.f.

ALOES. — Cape primes, spot, 180s. per cwt. and shipment, 165s., c.i.f. Curação, 500s., spot.

ARECA.—Selected round nuts, 125s. per cwt., spot.

BALSAMS. — Quotations per lb. are:—CANADA: Spot, 22s. COPAIBA: Para from 7s. 6d. duty paid: PERU: Spot, 10s. in bond. Totu (genuine as imported): spot cleared and B.P., 14s. 3d.

BELLADONNA.—Herb is 8s. 3d. per lb. on the spot. Root is 1s. 6d. spot; shipment, 1s. 3d., c.i.f.

BENZOIN.—Sumatra block on the spot is £22 to £28 as to quality.

Buchu.—Spot rounds are 4s. 3d. per lb. and new-crop for shipment, 4s., c.i.f.

Calabar BEANS.—Spot offering at 1s. 7½d. per lb.

CALAMUS.—Root is quoted at 1s. 2d. per lb., c.i.f.

CALUMBA.—Root is 105s. per cwt., spot. CAMPHOR.—B.P. powder is 3s. 7½d. per lb. in bond.

Capsicums. — East African are from 140s. to 175s. per cwt. on the spot.

CARDAMOMS. — Aleppy greens, spot, 14s. per lb.; prompt shipment, 13s. 9d., c.i.f. Seeds, shipment, 20s., c.i.f.

Cascara. — Shipment, 275s., per cwt., c.i.f.; spot 295s.

CHERRY BARK.—Thin natural is 1s. 5½d. per lb., and rossed is 1s. 11d.

CINNAMON.—Ceylon for September (c.i.f.) per lb.; OOOO, 6s.  $0\frac{1}{2}$ d.; OOO, 5s.  $8\frac{1}{4}$ d.; OO, 5s. 7d.; seconds, 4s.  $1\frac{1}{4}$ d.; featherings, 1s.  $11\frac{3}{4}$ d.; quillings, 3s.  $6\frac{1}{4}$ d.; chips, 1s.  $3\frac{1}{4}$ d.

CLOVES. — Zanzibar on the spot are 2s. 11d. per lb.; shipment, 2s.  $6\frac{1}{4}$ d., c.i.f. Cocillana.—Bark is 2s. per lb. on the spot.

COLOCYNTH PULP.—Spot, 2s. 9d. per lb. DIGITALIS LEAF.—Purpurca from 1s. 2½d. to 2s. 7d. per lb., c.i.f.

ELEMI. — Spot from 1s.  $10\frac{1}{2}$ d. per 1b. shipment, 1s. 7d., c.i.f.

Ergot. — Portuguese, 5s. 6d. per 1b.; East European not offering.

Frangula.—Spot is 105s. per cwt.

GENTIAN. — Spot: French, 160s. per cwt.; Jugo-Slavian, 152s. 6d.

GINGER. — African, 115s. per cwt. spot and 112s. 6d., c.i.f. Jamaican No. 3, spot, 195s. and shipment, 180s., nominal, c.i.f. Cochin spot quoted 135s.; shipment, 140s.,

GUM ACACIA.—Kordofan cleaned sorts are 200s. per cwt. on the spot; September-October shipment, 194s., c.i.f.

HENNA.—Indian on the spot is now 95s. per cwt., ex wharf:

HONEY. — Australian light amber is 102s. 6d. to 105s, and medium amber 95s. to 97s. 6d. Argentine, 100s. to 105s.; Jamaican, 115s. to 120s.; New Zealand clover, 170s., nominal; all per cwt. on the spot.

HYDRASTIS.—Spot, 23s. per lb.

IPECACUANHA. — Shipment (c.i.f.). No offers by first-hand shippers. Spot is also difficult to find.

Karaya. — No. 1 gum on the spot is quoted at 260s, per cwt. nominal, No. 2 at 230s., nominal.

Kola nuts. — Jamaican spot market cleared, shipment, 7d. pcr lb., c.i.f. African, 5d. to  $5_4^{\rm d}$ d. spot and 4d., c.i.f.

Lanolin. — Anhydrous, B.P. is from 170s. to 175s. per cwt. in 1-ton lots and

HYDROUS, B.P., 150s., free drums, delivered.

LIQUORICE. — Natural root: Persian on the spot is 50s.; Anatolian, 60s, and Russian, 66s. per cwt. Block juice: Anatolian and Chinese, 190s. per cwt.; Italian stick from 310s. to 476s. per cwt.

LOBELIA HERB.—Spot offers of American are 3s. 9d. per lb. and for shipment 3s. 6d., c.i.f. Dutch 3s. 2d. (old crop), c.i.f. for shipment; spot 3s. 5d.

Lycopodium.—Triple-sifted, 30s. per lb. spot.

MACE.—Whole pale blade 23s. 6d. per lb. on the spot.

MENTHOL.—Chinese spot cleared. Business done afloat at 54s., c.i.f.; September—October shipment quoted at 53s. 6d. per lb., c.i.f. Brazilian 41s. in bond.

Nutmegs. — West Indian 80's 17s. per lb., spot; sound unassorted, 10s. 6d.; defectives, 8s. 6d.

Nux vomica. — Scarce. Shipment, 125s. per cwt., c.i.f., quoted.

Orange PEEL. — Spot: Sweet ribbon, 2s. per lb.: bitter quarters: West Indian, 1s.; Spanish, 1s. 7d.

ORRIS ROOT. — Florentine is 345s. per

PAPAIN.—Tanganyikan, 16s. per lb., c.i.f., for grade one spot 19s. Ceylon No. 1 white, 15s., c.i.f.

PEPPER. — Steady. White Sarawak snot 3s. 3½d. per lb.; September—October shipment is 3s. 2½d., c.i.f. Black Sarawak on spot is 2s. 2d. per lb. with shipment 2s. 2½d. per lb.

PEPPERMINT LEAVES.—Dutch, 2s. 2d. to 2s. 10d. per lb., c.i.f.

PIMENTO.—Spot value is 550s. to 560s. per cwt.

PODOPHYLLUM.—*Emodi* is 200s. per cwt., spot, and 195s., c.i.f.

PYRETHRUM.—Extract, minimum 25 per cent. w/w pyrethrins, is 75s. per lb. for small lots.

Quassia.—Spot offers are 55s. per cwt., ex wharf.

OUILLAIA.—Spot offers of whole bark at 125s. per cwt.; cut, 160s. Whole for shipment, 90s., c.i.f.

RAUWOLFIA.—Canescens, 3s. 6d. per lb., c.i.f.; Vomitoria, 2s. 3d., c.i.f.; Serpentina, 6s., c.i.f. asked.

RHUBARB. — Chinese small rounds 6s. 4½d. to 6s. 9d. on the spot.

SAFFRON. — Spanish is quoted at 200s. per lb.

SARSAPARILLA.—Jamaican native red on the spot is 2s. 6d. per lb. Shipment, 2s. 4d., c.i.f.

SEEDS.— (Per cwt.). ANISE.— Spanish, 160s.; Turkish. 135s., both duty raid. Caraway.— Dutch unchanged at 120s., duty paid. Celery.—Indian, 147s. 6d. on spot; shipment unchanged at 120s. c.i.f. Coriander.—Moroccan on spot quoted at 45s., duty paid. September shipment, 35s., c.i.f. Cumin.—Firm, Iranian, 270s., duty paid. September-October shipment, 225s., c.i.f. Dtll.—Indian is 80s. on spot: shipment, 70s. quoted c.i.f. Fennel.—Chinese only available on spot, at 130s., duty paid. Fenugreek.—Moroccan 38s. 6d., duty paid. Fenugreek.—Moroccan 38s. 6d., duty paid (sellers 40s.). Mustard.—English (rew crop), 75s. to 100s., according to quality.

SENEGA.—Spot is nominally 20s. per lb.: shipment, ideas 19s. 6d. per lb., c.i.f.

SENNA. — *Tinnevelly* LEAVES, prime No. 1, 1s. 5d. per lb., f.a.q.; No. 3, 10d. Pods: Manufacturing (f.a.q.), 1s. 3\function{4}{\text{d}}d. and hand-picked, 1s. 9d. to 2s. 2d. *Alexandria* pods: Manufacturing, offered from 1s. 6d. with hand-picked from 4s. to 6s. 6d.

TRAGACANTH. — No. 1 ribbon is £115 per cwt. No. 2, £105.

TURMERIC. — Madras finger on spot is 105s. per cwt. for old crop; current crop, 110s. Shipment is 92s. 6d., c.i.f.

#### **Essential and Expressed Oils**

BAY.—West Indian is 12s. 6d. per lb. on the spot.

BERGAMOT.—Spot supplies are from 85s. per lb.

Bois DE Rose.—Brazilian is 14s. 9d. per lb. on the spot and 14s. 6d., c.i.f.

CADE. — Spanish is 3s. 6d. per lb. for drum lots.

CAJUPUT. — Spot supplies are from 11s. 6d. per lb.

CALAMUS.—Spot quotations are 62s. 6d.

per lb.

CAMPHOR, WHITE. — Chinese is 1s. 9d.

per lb. in bond.

Cananga. — Spot is from 42s. 6d. to 45s. per lb.

CARAWAY.—Imperial oil is 27s. 6d. per

CARDAMOM.—Price per lb. is from 330s, for English-distilled and 260s, for imported.

CEDARWOOD. — American rectified, 5s. per lb. spot.

CELERY SEED. — Dutch oil is 90s. per lb. and Chinese, 65s.

CHENOPODIUM.—Spot value is 38s. per lb. for original containers.

CITRONELLA. — Ceylon, spot is cleared: shipment, 5s. 14d. per lb., c.i.f. Formosan, spot 5s. 4d. in bond, shipment 5s. 2d., c.i.f.

COD-LIVER. — B.P. is 11s. 6d. per gall. in charged returnable drums. Veterinary is from 9s. 6d. per gall.

CORIANDER. — B.P. oil is quoted from 62s. 6d. per lb.

CUBEB.—Small spot supplies of imported are 65s. per lb.; English, 90s.

CUMIN.—Imported oil is now about 90s. per lb.

EUCALYPTUS. — Australian 70 to 75 per cent. eucalyptol on the spot is 4s. 6d, per lb. 80–85 per cent., 5s. 3d. Spanish (70–75), 4s. spot. Chinese 3s. to 3s. 6d.

Fennel.—Spanish sweet on the spot is quoted at 12s. 6d. per lb.

GERANIUM.—Bourbon is 185s. per lb. on the spot.

LAVANDIN.—Spot is from 10s. to 12s. 6d.

per lb. for original drums.

Lavender.—French oil, 40-42 per cent. is 50s. per lb.

LAVENDER SPIKE.—Spanish is at 15s. to 17s. per lb. for original drums.

LEMONGRASS.—Spot 7s. 9d. per lb., and shipment, 7s. 6d., c.i.f.

Lime.—West Indian distilled is in the region of 50s. per lb. on the spot.

Nutmeg. — Imported B.P. oil is from 70s. to 92s. 6d. per lb. English distilled

PATCHOULI.—Penang is 36s., duty paid

and 31s., c.i.f., per lb.

Pennyroyal.—Spot is quoted from 17s.
per lb., duty paid.

PEPPERMINT.—Arvensis: Chinese is 27s. per lb., spot nominal: September—October shipment nominally 24s., c.i.f. Brazilian 10s. 9d. to 11s. 3d. both spot and shipment. Piperita: Italian "Mitcham-type" from 42s. 6d. to 48s. 6d.; American, 27s. 6d. to 30s., as to origin.

SANDALWOOD. — Mysore spot 90s. to 92s. 6d. per lb. East Indian, 90s. to 92s. 6d. per lb.

#### UNITED STATES REPORT

NEW YORK, SEPTEMBER 22: Among FINE CHEMICALS domestic makers state that they have been shading prices on MERCURIALS below their list prices. It was said that imports have been increasing here, particularly YELLOW OXIDE, Little CARNAUBA WAX is offered from Brazil for nearby shipment.

#### WORLD TRADE

Pakistan Imports.—During June, Pakistan imported chemicals, drugs and medicines to the value of Rs. 4,093,000.

Phenol Plant for Amsterdam. -- The Koninklijke Zwavelzuurfabrieken v/h Ketjen, N.V., Amsterdam, Holland, have decided to build a plant for the production of synthetic phenol. Anhydrous sodium sulphite will become available as a by-product. Start of production is planned towards the end of 1960.

West German Plastics Fair.—About 650 manufacturers of plastics and plastic goods, including 190 foreign firms, are to exhibit at a trade fair to be held in Dusseldorf October 17–25. West German production of plastic material has increased from 396,000 tons in 1955 to 658,000 tons in 1958, and of plastic goods from 120,000 tons to 340,000 tons.

United States Starch Imports.—The United States Tariff Commission has announced that an investigation to determine the effects of starch imports on the United States industry had been started. Public hearings would open in Washington on January 26, 1960, the Commission said. The investigation has been asked by the Senate Finance Committee after complaints had been received of heavy imports of starch flour from Brazil, Malaya and Thailand,

#### TRADE MARKS APPLICATIONS ADVERTISED BEFORE REGISTRATION

#### From the "Trade Marks Journal," September 9

For pharmaceutical preparations and substances for human and veterinary use; and sanitary substances and disinfectants; all containing chlorine

ATHROCLOR, 788,372, by Imperial Chemical Industries, Ltd., London, S.W.1.

For pharmaceutical preparations for use in discouraging or stopping the habit of smoking (5) FINIFUME, 788,933, by H. & T. Kirby & Co., Ltd., London, N.W.2.

For pharmaceutical preparations and substances

RELDAR, 789,429, by Boots Pure Drug Co., Ltd., Nottingham.

For pharmaceutical preparations for tranquillising purposes (5)

PROZINE, 789,030, by American Home Products Corporation, New York, U.S.A.

For photographic instruments and apparatus and parts and fittings (9)

Device with numerals 4 4, 786,100, by Coronet, Ltd., Birmingham, 19.

For toilet paper (5) CLENSEL, 785,531, by John Paterson & Co., Ltd., Glasgow, C.2.

#### From the "Trade Marks Journal," September 16

For methyl cellulose and mixed cellulose ethers having methyl groups (I)

METHOCEL, 779,107, by Dow Chemical Co., Midland, Michigan, U.S.A.

For detergents for use in the farming and dairy

TRIPLUS, 785,548, by Reddish Chemical Co., Ltd., Reddish, Stockport, Ches.

For photographic films, plates and paper, all being sensitised; and photographic chemicals (1)
1LFACHROME, 787,578, ILFACOPY, 789,081,

by Ilford, Ltd., Ilford, Essex. For paper, plates and films, all being sensitised

articles for use in photography; and chemical substances used in photography (1)

ANSCOHROME, 788,382, by General Aniline & Film Corporation, New York, U.S.A. For toilet lotions for the hair (3)

BLUE WOOD, B782, I21, by Amy Gainty, Colchester, Essex.

For all goods (3)

HI AND DRI, 785,030, by Revlon Inc., New York, U.S.A. MASTOCIDE, 788,094, by Harry Price, Belfast, Northern Ireland. For perfumed oils (3)

AEROFLOR, 788,518, by Chas. Zimmermann & Co., Ltd., Perivale, Greenford, Middlesex. For non-medicated toilet preparations for the skin, being goods manufactured and for sale in the United Kingdom and for export to the Republic of Ireland and the Channel Islands (3)

POLYDERM, 788,777, by Chesebrough-Pond's, Ltd., London, N.W.I0.

For non-medicated toilet preparations, cosmetic preparations, brilliantine, perfumes, soaps, face powders (non-medicated), hair lotions, shampoos, nail lacquers, and toilet articles (not included in other classes) (3)

COTY LONG LAST, 788,905, by Coty (England), Ltd., London, W.1.

For toilet soap containing germicides (3) JESOLINE, 789,624, by Jeyes' Sanitary Compounds Co., Ltd., Barking, Essex.

For preparations and substances, all for use in cleaning lavatories (3) and for sanitary preparations and substances, none being for personal use

TOI, B782,712, B782,711, by Haus-Chemikalien G.m.b.H., Ingelheim-on-Rhine, Germany.

For non-medicated toilet preparations, cosmetics, dentifrices, mouth washes (not medicated), toilet preparations for the hair, and perfumed soap (3) and for chemical substances prepared for use in medicine and pharmacy (5)

SILVIKRIN, 788,708-09, by Silvikrin Laboratories, Stanmore, Middlesex.

For detergents (not for use in industrial or manufacturing processes) (3) and sterilising compounds, germicides and disinfectants (5)

LINALIFE, 787,691-92, by Deosan, Ltd., London, W.I.

For pharmaceutical preparations for the treatment of mental diseases (5)

ELIMIT, 778,277, by N.V. Koninklijke Pharmaceutische Fabrieken V/H Brocadcs- Stheeman & Pharmacia, Amsterdam, Holland.

For all goods (5) Device with word DEGESCH, 781,023, by Schädlingsbekämpfung Deutsche G.m.b.H.. Frankfurt-on-Main, Germany. 787,742, by Benger Laboratories, Ltd., Holmes Chapel, Ches. SEDASMA, 788,046, by Crookes Laboratories, Ltd., London, N.W.IO. FLEXULE, 789,084, by Allen & Hanburys, Ltd., London, E.2. OTUMPEN, 789,792, by C. H. Boehringer Sohn, Ingelheim-on-Rhine, Germany.

For pharmaceutical preparations consisting of or containing enzymes (5)

PLURAZYME, 781,628, by A. H. Robins Co., Ltd., London, E.C.3.

For pharmaceutical products (5)

METOREN, 781,669, by Sogespar S.A. Fribourg. Switzerland.

For soluble, effervescent, alkalised aspirin in powder form, containing vitamin C, being a pharmaceutical preparation prepacked in sachets (5) CONPRIN, 781,698, by Contabs, Ltd., Brigh-

ton, Sussex. For deodorants (5)

PURIBIN, 784,284, by Samuel Wachsman, London, E.16.

For medicines for animals (5)

PECUDIN, 784,691, by Farbenfabriken Bayer A.G. Leverkusen, Germany.

For mineral supplements containing vitamins for use as nutritional aids by addition to feeding stuffs for animals and poultry (5)

MIN-O-V1T, 785,194, by Bell & Sons, Ltd., Liverpool, 3.

For chemical preparations in stick form for use in repelling insects (5)

STIKPEL, 785,607, by Rexall Drug Co., Ltd., Loughborough, Leics.

For pharmaceutical preparations and substances

DECASERPYL, 785,740, by Laboratoires Français de Chimiotherapie S.A., Paris, France. TOTACILLIN, 789,619, by C. L. Bencard, Ltd., London, N.W.10.

For veterinary preparations in the nature of shampoos (5)

SHAMPOODLE, VETSHEEN, 787,398-99, by Warner-Lambert Pharmaceutical Co., Morris Plains, New Jersey, U.S.A.

For pharmaceutical preparations, fungicides and antiseptics (5)

DELFUCIN, 787,483, by Royal Netherlands Distilleries, Delft, Holland.

For pharmaceutical, dietetic, infants', and invalids' foods; and medicated confectionery (5) POMPEY, 787,654, by H. S. Whiteside & Co., Ltd., London, S.E.5.

For pharmaceutical preparations and substances for human and veterinary use; and sanitary substances and disinfectants (5)

SUBACOL, 788, III, AVOLEX, 788, 598, by Imperial Chemical Industries, Ltd., London, S.W.L.

For preparations for use as nutritional additives to animal foodstuffs (5)

SUPERTRATE, 788,860, by Dorset Concen-

trates & Minerals, Ltd., Poole, Dorset.

For pharmaceutical and veterinary preparations for the treatment of coughs or colds (5)

NOSTUSSIVE, 789,077, by Aspro-Nicholas,

Ltd., Slough, Bucks,

For medicated confectionery (5)

MARS, 789,301, by Mars, Ltd., Slough, Bucks. For photographic and cinematographic apparatus and instruments (9)

KESTRAL, KESTREL, B789,262-63, by Bush & Meissner, Ltd., London, W.1.

## PRINT AND PUBLICITY

BRUCE STARKE & Co., LTD., 5 Fenchurch Street, London, E.C.4: Dragoco Report No. 7, 1959. Pp. 18.

DISTILLERS PLASTICS GROUP, Devonshire House, Piccadilly, London, W.1: Everyman." Pp. 12. " Plastics Serve

FLEMINO SAFETY EQUIPMENT (Division of J. & R. Fleming, Ltd.), 146 Clerkenwell Road, London, E.C.1: "Eyes at Work."

THOMAS HEDLEY & Co., LTD., Gosforth, Newcastle-on-Tyne, 3: "Hedley in Trafford Park."

LONDON PRESS EXCHANGE, LTD., 110 St. Martin's Lane, London, W.C.2: "The Teenage Consumer." Part of the content of this L.P.E. paper formed the basis of an address by Dr. Mark Abrams to the Conference of the British Institute of Management on November 27, 1958 (C. & D., December 6, 1958, p. 600).

MARCHON PRODUCTS, LTD., Whitehaven, Cumberland: "Laurex." Pp. 4. "Nansa powders." Pn. 6.

REVION INTERNATIONAL CORPORATION, 86 Brook Street, London, W.1: "Portrait of a Prettier You." Pp. 18.

#### **Periodicals**

CHILEAN JODINE EDUCATIONAL BUREAU, Chile House, Ropemaker Street, London, E.C.2: Current Iodine Literature Vol. 6 No. 10, 1959.



"TUMBLE" DISPLAY: Capable of being set up "in a matter of seconds," the Delsey toilet-tissue "tumble" display produced by Kimberly-Clark, Ltd., Larkfield, nr. Maidstone, Kent, is 11 ft. square and 21 ft. high.

#### COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, September 28
School of Pharmacy, College of Advanced
Technology, Birmingham, at 2.30 p.m. Mr. D. W. Hudson (immediate past-president, Pharmaceutical Society). Address to students and prize-giving.

INDUSTRIAL WELFARE SOCIETY, 48 Bryanston Square, London, W.1, at 2.30 p.m. Mr. H. Samuels on "Changes in Industrial Law."

Tuesday, September 29

BIRKENHEAD AND WIRRAL PHARMACISTS' ASSOCIA-TION AND BRANCH, PHARMACEUTICAL SOCIETY, Central hotel at 8 p.m. Film.

DARTFORD BRANCH, PHARMACEUTICAL SOCIETY, Wellcome club, High Street, at 8 p.m. Talk

SLOUGH BRANCH, PHARMACEUTICAL SOCIETY, White Hart hotel, Beaconsfield, at 8 p.m. Mrs. N. Mitchell on "The Alpine Rally."

Wednesday, September 30
NORTH EASTERN BRANCHES, PHARMACEUTICAL SOCIETY, Three Tuns hotel, Durham City, at 7 p.m. Regional pharmaceutical conference.

SOUTH LONDON AND SURREY PHARMACISTS' GOLF-ING SOCIETY, Shirley Park golf club, Addis-combe Road, Croydon, at 1.30 p.m. Stableford competition and at 7 p.m. annual supper.

Thursday, October 1

HESTER BRANCH, PHARMACEUETICAL SOCIETY,
"The Blossoms," at 8 p.m. Mr. I. Macdonald
on "Factors in Successful Retail Business."

Doncaster Branch, Pharmaceutical Society, Doncaster Arms hotel, at 7.30 p.m. Annual dinner-dance.

HULL CHEMISTS' ASSOCIATION AND BRANCH, PHAR-MACEUTICAL SOCIETY, Hammond's restaurant, at 7.15 p.m. President's reception.
INSTITUTE OF BIOLOGY, Royal Geographical Society, Kensington Gore, London, S.W.7, at

10 a.m. Symposium "Biological problems arising from the control of pests and diseases."

LIVERPOOL CHEMISTS' ASSOCIATION AND BRANCH, PHARMACEUTICAL SOCIETY, Exchange hotel, at 8 p.m. Talk and film.

POLAROGRAPHIC SOCIETY, "Duke of York," 8 Dering Street, London, W.1, at 7 p.m. Informal discussion.

SOCIETY OF CHEMICAL INDUSTRY, Adam house, Edinburgh, at 5.30 p.m. 6th Lister Memorial Lecture, Dr. N. B. Eddy (Department of Health, Bethesda, U.S.A.) on "Chemical Structure and Action of Morphine-like Analgesics and Related Substances.

Friday, October 2

HAMES VALLEY SECTION, MICROCHEMISTRY
GROUP, SOCIETY FOR ANALYTICAL CHEMISTRY; THAMES THAMES VALLEY SECTION, ROYAL INSTITUTE OF CHEMISTRY; LONDON SECTION, SOCIETY OF CHEMICAL INDUSTRY, Inorganic chemistry lecture theatre, Oxford university, at 6.30 p.m. Joint meeting.

# **EVENING COURSES**

#### Interesting the pharmacist

LECTURES specially designed to help the pharmacist are being arranged for the forthcoming winter session throughout the country. The brief details given below are taken from correspondence received during the past week. Application to attend should be made to the addresses given for each course without delay

BRIGHTON: The Economics of Retail Pharmacy. Six lectures. Thursdays, 8 p.m. October 1 – November 5. Lecturers: Messrs. J. E. Blackwell, A. Duckworth, A. Heath and E. A. Jackson. Centre: (Dr. J. C. Parkinson) School of Pharmacy, Technical College, Brighton, 7. Fee, £1.

LONDON: Pharmaceutical Business Administration. Six lectures. Tuesdays, 8 p.m. October 20 – November 24. Lecturer: Mr. H. W. Tomski. Centre: Bonnington hotel, Southampton Row, W.C.1. Applications to 21 Hillcroft Avenue, Pinner, Middlesex. Fee, £3 3s.

Watford: Pharmaceutical Continuation Lectures. Course of six lectures commencing at 8 p.m., October 1, and ending March 3, 1960. Lecturer: Mr. L. Priest. Centre: Queen's Road College of Further Education, Watford. Applications to Mr. R. Jenkins, 90 High Street, Bovingdon. Fee, 15s.

## COMMERCIAL TELEVISION

Programme details are given to enable chemists to put in linking-up displays if they wish. Figures in the columns represent number of appearances of the product during the week.

October 4-10		London	Midland	North	Scotland	Wales	South	N.E.
Alka-Seltzer		2	1	1	_	2	1	1
Anadín		3	4	2	4	4	3	3
Aspro		5	5	4	4	5	5	5
Ayrton's antiseptic of	cream	_	_	_	2	_	_	—
Beecham's pills		1	2	1	2	2	2	2
Beecham's powders		4	3	7	3	4	3	3
Binki pants .		—	_	_	_	_	_	2
Bisodol		4	_	_	5	_	_	~
Brístow's lanolin sha	mpoo	2	2	1	_	_	1	_
Brylcreem		10	9	3	5	3	10	10
Camay soap		—	_	-		_	2	2
Cephos			_	3	_	_	_	
Christy's lanoline face	pack	1	1	_	1	1	1	1
Coliclean		2	_	-	_	_	_	_
Cooper's aerosols		2	2	2	2	2	2	2
Cuticura		1	—	_	_	_	_	
Damaskin		1	1	—	_		_	
Dekrasil		_			_	_	_	4
Formula 21		3	3	3	3	3	3	3
Fynnon salt		2	2	2	2	2	2	2
Germolene		3	3	3	3	4	2	3

Hiltone		3	_			_	3	_
Imperial Leather		3	3	3	3	_	_	3
Johnson's Baby Suds		_	_	_	_	_	_	1
Knights Castile soap		3	2	2	1	2	2	3
Loxene shampoo		1	1	2	1	2	2	2
Macleans tooth-paste		4	3	3	3	4	2	4
Marigold baby pants		—	_	_		2	_	_
Phosferine		2	1	1	1	1	1	1
Phyllosan		_	1	1	_		_	1
Polly Roll		1	1	2	2	1	1	1
Ponds		3	3	3	3	3	3	3
Remington shavers		2	2	2	2	3	2	2
Rimmel "Beauty on	a							
Budget "		3	5	3	3	3	3	3.
Rinstead pastilles		1	1	_	_	1	1	
Rívella		1	—	_			_	_
Sanatogen		—	2		_		_	
Setlers			2	_	_	2	3	
Silvikrin pure		1	1	2	2	1	3	2
Silvíkrin shampoo		2	3	3	3	8	3	2
Valderma balm		3	3	1	2	2	—	
Vaseline petroleum jelly		4	4	4	4	4	4	4
Veno's cough mixture		3	3	3	3	3	2	3
Yeast-Vite		_	1	1	-		_	-



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ALLIED LABORATORIES ber 21)		. (fr	om Se		m-
Throsil lozenges 20		6			R
BEECHAM FOODS, LTD	(from	. Se	ptemb	er	19)
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PLJ (large)			4	3	R
Ribena			2 4 3	6	R
BOVRIL, LTD. (from Octo					
	De				
Virol	25	0	2	9	A
	52	0			
THE BRITISH DRUG H September 21) =	OUSE	S, 1	LTD.	(fr	om
	E	ach			
Mycil ointment	1	-6	2	3	R
spray	5	10	8	9	R
CIBA, LTD. (from Septemb Entobex tablets	er 21)				
50 mgm. 20	6	8	10	0	R
100	30	ō	45	0	R
500	146	8	220	0	R
COOPER, MACDOUGAL	L &	RO	BERT	SO	N.
LTD. (from September 28)	Do	7.			
Medic-aire* 5 oz.	49	3	6	6	R
PROPRIETARY PRESSUR	E PAC	CKA	GES,	LI	D.

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NI	EW	PRO	DŪ	CTS	AND	<b>PACKS</b>
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	72		14	6
BOOTS PURE DRUG	co.,	LTD.		
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	100	13 0
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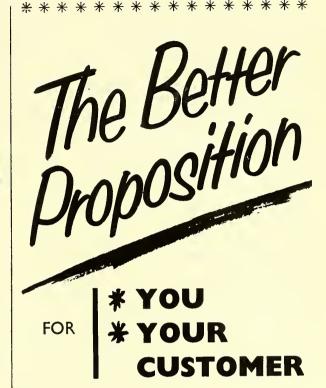
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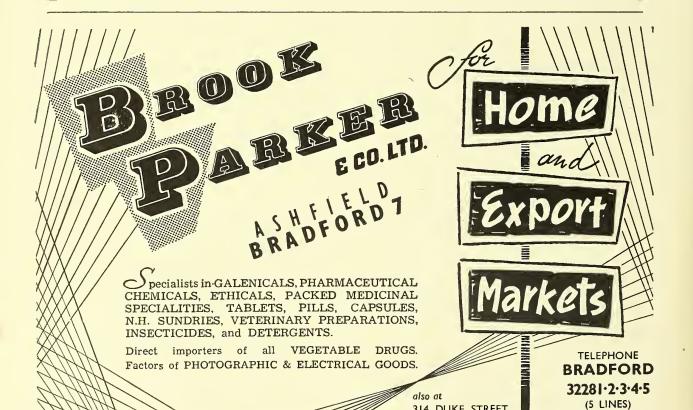
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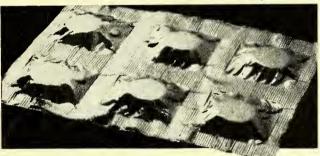


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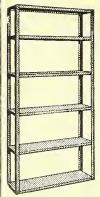
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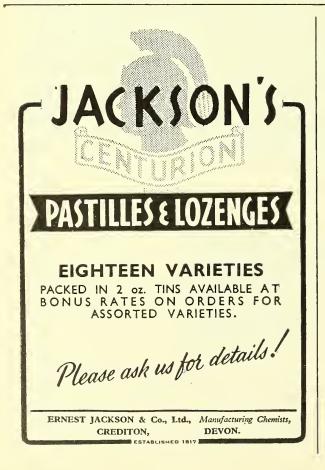
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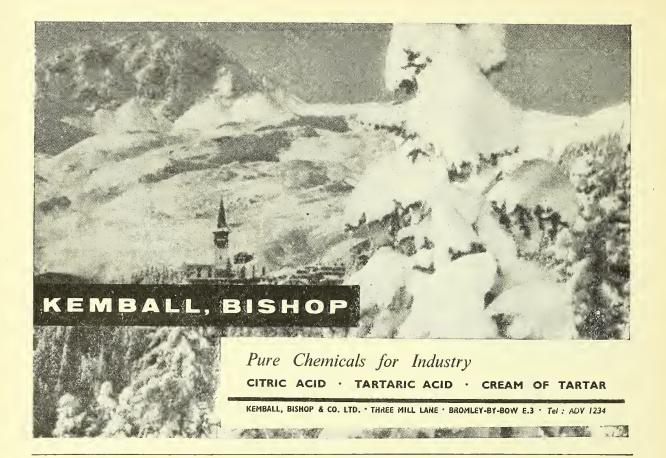
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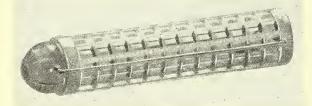
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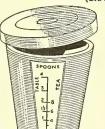
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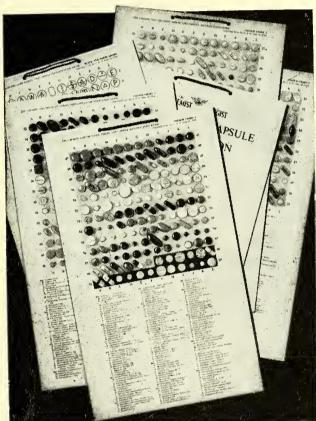
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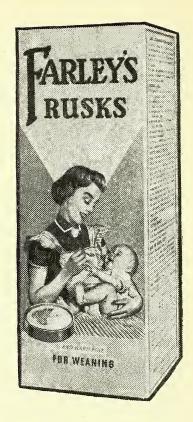
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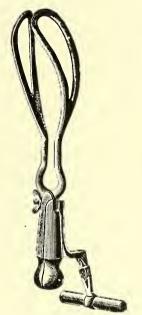
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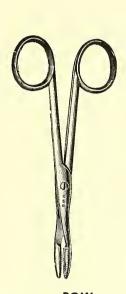
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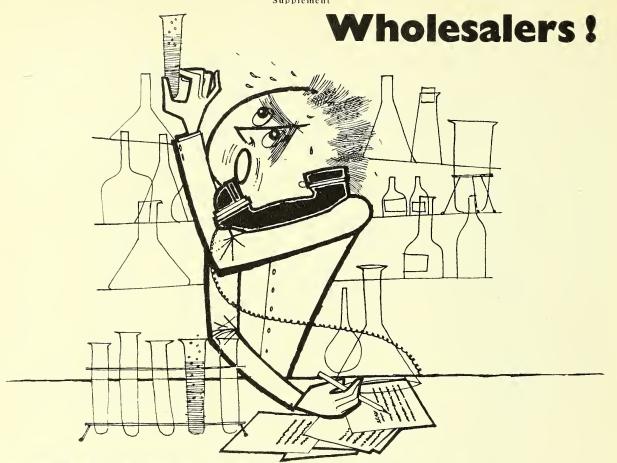
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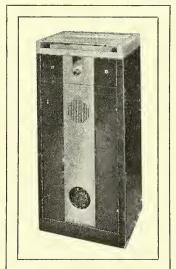
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Senior Pharmacist
required December 1. Engaged almost exclusively on preparation of sterile solutions in a small but well-equipped department. Whitley Council salary and conditions, Previous experience in preparation of sterile products desirable.

Applications naming two referees to Hospital Secretary. Secretary.

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Assistant-in-Dispensing
required. Whitley Council scales. Permanent

appointment. Resident or non-resident.

Applications giving previous experience and names and addresses of two referees to Hospital Secretary, Black Notley Hospital, nr. Braintree, from whom further details may be obtained.

#### CANADIAN RED CROSS MEMORIAL HOSPITAL, TAPLOW

Assistant-in-Dispensing required November 1, responsible to Chief Pharmacist. Possession of Certificate of Society of Apothecaries desirable. Whitley salary. Applications stating age, qualifications and experience, with names of two referees to Scere-

# CENTRAL GROUP HOSPITAL MANAGEMENT COMMITTEE Senior Pharmacist

Senior Pharmacist
for Bethnal Green Hospital. Modern department
approved for training students. Salary scale
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Group Secretary, 213 Kingsland Road, London, E.2. C 485

#### EDINBURGH NORTHERN GROUP OF HOSPITALS

Pharmacist
required January 1, 1960, for Western General
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Applications, giving the names of two referces,
to the Medical Superintendent, Western General Hospital, Edinburgh, 4. C 9700

#### EAST HAM MEMORIAL HOSPITAL SHREWSBURY ROAD, LONDON, E.7

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whole-time, immediately, Annual salary (22 and
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Weighting, with £20 per annum additional
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Hospital Secretary.

# GENERAL HOSPITAL, NOTTINGHAM Locum Pharmacist

required immediately for the General Hospital and Eye Hospital.

Salary, £18 18s. per week. Applications to the Group Secretary, General Hospital, Nottingham.

#### HERTFORD COUNTY HOSPITAL, HERTFORD

(21 miles from London)
Senior Pharmacist (Category III)
Applications are invited for the above post.
Salary scale £675 to £865 p.a. Duties under direction of Chief Pharmacist and to commence as soon as possible. Department responsible for purchase and issue of drugs, dressings, surgical instruments and equipment for above and two other small hospitals, also for supervision of Central Sterilising Department.
Applications giving details of age, qualifications

Applications giving details of age, qualifications and experience, with names of two referes to Hospital Secretary, Hertford County Hospital, Hertford, Herts. C 9664

HIGHBURY HOSPITAL,
BULWELL, NOTTINGHAM
Pharmacist

Applications are invited for the above appointment. The post offers good opportunity to obtain experience in general pharmaceutical work.
Salary £605 x £30 rising to £815. Apply stating age, qualifications, experience and names of two referees. to Hospital Secretary. C 9687 age, qualifications, experience and two referees, to Hospital Secretary.

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Locum Pharmacist
required immediately. Salary £18 18s, per week
for three weeks or £16 16s, per week for a
longer period. Applications to Physician Superintendent to the Hospital. C 483

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#### Appointments—Continued

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Assistant-in-Dispensing required. Whitley Council rates. Applications, stating age, experience and names of two referees to the Secretary. C 462

# LEAVESDEN GROUP HOSPITAL MANAGEMENT COMMITTEE, ABBOTS LANGLEY,

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Nr. WATFORD, HERTS
Pharmacist
required for duties in the hospitals comprising this Group. Salary in the scale £605-£815 p.a. Group situated in rural Hertfordshire within easy reach of London. Viewing of the department by appointment with the Group Chief Pharmacist. Telephone: Garston 2222. Apply Group Secretary with details of experience.

C 9676

#### LONDON JEWISH HOSPITAL, STEPNEY GREEN, E.1

Locum Assistant-in-Dispensing required at the above hospital, Salary according to Whitley Council scales, Preference given to applicants holding the certificate of the Society of Apothecaries of London, Applications stating age, experience and names and addresses of two referees to the Chief Pharmaciet. C 9674 referees, to the Chief Pharmacist.

# MID-WALES H.M.C.

MID-WALES H.M.C.

Amended Advertisement
Chief Pharmacist (Category III)
Applications are invited for the above post for the Group Pharmacy. This is a pioneer appointment and the successful applicant will be required to organise and develop a new pharmaceutical service for the Group, and also will be required to assist in the planning of a department in a new hospital unit to be built in the near future. Terms and conditions of service in accordance with Pharmaceutical Whitley Council agreements salary scale, Category III, £815 by 8 increments to £1,115. Unfurnished flat available.

Applications giving full details of age, qualifica-tions and experience together with the names and addresses of three referees to Group Secre-tary, 31 North Parade, Aberystwyth, by Sep-tember 28, 1959. C 9679

# ROYAL GWENT HOSPITAL, NEWPORT, MON

Assistant-in-Dispensing required. Apothecaries' Hall or equivalent an advantage. Duties include some cierical work. Salary scale £215-£510 per annum, commencing at £395 at age 22 or over. Applications with full details of experience, together with the names of two referees to T. A. Jones, Group Secretary, 64 Cardiff Road, Newport, Mon. C. 9702.

# SEAMEN'S HOSPITALS

SEAMEN'S HOSPITALS
MANAGEMENT COMMITTEE
Pharmacist
required from September 28, 1959, for duties
under Chief Pharmacist at Dreadnought Hospital, Greenwich. Salary and conditions of service in accordance with Whitley Council regulations. Staff flat available if required. Applications stating age, qualifications and experience, together with the names and addresses of two referees, to be sent to the Group Secretary, Dreadnought Seamen's Hospital, Greenwich, S.E.10.

# SOUTH LONDON HOSPITAL FOR WOMEN AND CHILDREN, CLAPHAM COMMON, S.W.4 (Acute General, 254 beds)

Senior Pharmacist required. Applications stating age, qualifications, experience and names of two referees to the C 469

# SHREWSBURY GROUP (15) HOSPITAL MANAGEMENT COMMITTEE, SHELTON MENTAL HOSPITAL,

SHREWSBURY Chief Pharmacist

Applications are invited from ladies and gentlemen for the above post, single-handed, at the Shelton Hospital (Mental). House may be avail-

Salary £700 x £35 (1) x £30 (3) x £35 (1) x £30 (2) x £25 (1) to £945. Conditions of service as prescribed by the Pharmaceutical Council of

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The appointment will be subject to the provisions of the National Health Service (Superannuation) Regulations.

Applications, accompanied by the names and addresses of three referees, should be addressed to the Medical Superintendent, Shelton Hospital, Shrewsbury. C 9712

# STEPNEY GROUP HOSPITAL MANAGEMENT COMMITTEE, MILE END HOSPITAL,

BANCROFT ROAD, LONDON, E.1
Post-Graduate Student Pharmacist
required at the above hospital to commence
duty in January 1960. Salary scale and conditions of service in accordance with Whitley
Council. Applications, with names of two referees, to be sent to the Chief Pharmacist.

# STEPPING HILL HOSPITAL, STOCKPORT (Category IV)

Senior Pharmacist and Pharmacist Immediate applications are invited for the above

The Department provides a service to a Group of Hospitals of 1,200 beds, and offers experience in pharmaceutical practice.

Applications, with names of two referees, should be addressed to the Group Secretary, Stockport and Buxton Hospital Management Committee, 598 Shaw Heath, Stockport.

C 9683

#### THE UNITED BIRMINGHAM HOSPITALS, THE QUEEN ELIZABETH HOSPITAL,

EDGBASTON, BIRMINGHAM, 15
Pharmacist
Applications are invited for the above post at the Queen Elizabeth Hospital. Duties mainly dispensing for In-patients. Salary scale at present £605 x £30 (3)—£795 x £35 (1)—£730 x £30 (2)—£790 x £25 (1)—£815 per annum, but this is under review. Applications stating age, experience and the names and addresses of two referees to the House Governor. C 9705

# THE UNITED BIRMINGHAM HOSPITALS,

HOSPITALS,
THE QUEEN ELIZABETH
HOSPITAL,
EDGBASTON, BIRMINGHAM, 15
Deputy Chief Pharmacist (Category IV)
Applications are invited for the post at this
Teaching Hospital. Applications stating age,
qualifications and particulars of previous experience, together with the names of two referees
to the House Governor.

C 9706

# WEST MIDDLESEX HOSPITAL, ISLEWORTH, MIDDLESEX Assistant-in-Dispensing

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# UPTON HOSPITAL.

SLOUGH
Locum Senior Pharmacist
required October 1. Applications stating age, qualifications and experience with names of two referees to Secretary, immediately. C 9711

## TEACHING APPOINTMENTS

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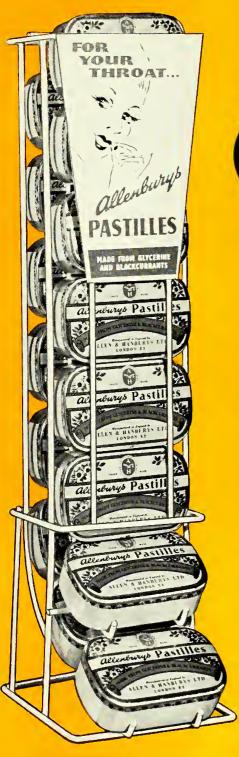
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